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(54) Title: B-CELL CHRONIC LYMPHOCYTIC LEUKAEMIA

(57) Abstract: The present invention relates to materials and methods for the diagnosis and treatment of B-cell chronic lymphocytic leukaemia (BCLL). The present invention relates to a method of treating BCLL in an individual comprising modulating the expression of the CLLD8 and/or the NY-REN-34 gene.

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B-CELL CHRONIC LYMPHOCYTIC LEUKAEMIA

The present invention relates to materials and methods for the diagnosis and treatment of B-cell chronic lymphocytic leukaemia (BCLL).

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Chronic lymphocytic leukaemia (CLL) is a disorder of morphologically mature immunologically less mature lymphocytes and is manifested by progressive accumulation of these cells in the blood, bone marrow, and lymphatic tissues. There is no curative therapy, and the overall 5-year survival is approximately 60% depending upon the stage of disease.

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CLL occurs primarily in middle-aged and elderly individuals, with increasing frequency in successive decades of life. The clinical course of this disease progresses from an indolent lymphocytosis without other evident disease to one of generalised lymphatic enlargement with concomitant pancytopenia. Complications of pancytopenia, including haemorrhage and infection, represent a major cause of death in these patients. Immunological aberrations, including Coombs-positive haemolytic anaemia, immune thrombocytopenia, and depressed immunoglobulin levels may all complicate the management of CLL.

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Understanding the molecular basis for disease, by sequencing the human genome and the genetic elements underlying such conditions will enable the identification of those individuals at greatest risk of disease, and enable the development of effective treatments for disease. This will allow the better matching of treatment and disease, and enable the production of new and improved targets for drugs. Screening and treatment of disease may also be better targeted to those in need, thus increasing the cost-effectiveness of health-care provision.

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The present invention aims to overcome or ameliorate previous limitations in the art by providing means and methods for the detection and treatment of individuals having, or being susceptible to BCLL.

5 In a first aspect of the invention, there is provided a method of treating BCLL in an individual, the method comprising modulating the expression of the CLLD8 and/or the NY-REN-34 gene. Preferably, the method modulates the production of a gene product of the CLLD8 and/or the NY-REN-34 gene. The gene product may be a composite of CLLD8 and/or NY-REN-34. The term
10 "gene product" includes both mRNA and polypeptide sequences derived either from genomic DNA or from isolated or recombinant cDNA coding for sequences the CLLD8 and/or the NY-REN-34 gene. The gene NY-REN-34 is also known as ANGE.

15 In the present invention, CLLD8 is the gene encoded by nucleotides 294727-309803 of bA103J18.03548 (Figure 1). NY-REN-34 is the gene encoded by nucleotides 313649-346509 of bA103J18.03548 (Figure 1). References to the CLLD8 or NY-REN-34 genes in the present application include variant sequences showing 80%, 81%, 82%, 83%, 84%, 85%, 86%, 87%, 88%, 89%,
20 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99% and 100% homology with the NY-REN-34 gene of Figure 1, and preferably sharing one or more functional characteristics with the CLLD8 or NY-REN-34 genes respectively.

25 There is also provided an isolated or recombinant polynucleotide sequence encoding a protein having the domain structure Pre-SET-SET-Post-SET-PHD-PHD. Preferably, the domain structure is CpGBD- Pre-SET-SET-Post-SET-PHD-PHD. SET and PHD domains will be known to persons skilled in the art.

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Preferably, the CLLD8 and/or the NY-REN-34 genes encode a single gene product comprising both CLLD8 and NY-REN-34. This composite gene product is produced as a splice product of the CLLD8 gene, under control of the CLLD8 promoter, and comprises the NY-REN-34 gene product. This
5 composite CLLD8-NY-REN-34 gene product results from splicing together of the CLLD8 and NY-REN-34 genes and is shown to be involved in BCLL.

By the terms "CLLD8" and "NY-REN-34" are meant either the complete gene product, or parts thereof. Parts of the gene products are preferably splice
10 variants, and preferably include at least one exon. Thus, the single gene product includes at least one exon of both CLLD8 and NY-REN-34.

In particular, the first aspect may be achieved by modulating the activity of a regulatory element e.g. the CLLD8 promoter, or modulating the splicing of the
15 CLLD8 and/or NY-REN-34 genes. By modulating or influencing is meant inhibiting, enhancing or otherwise altering the expression.

In a second aspect of the invention, there is provided a polynucleotide sequence or a gene product of the CLLD8 and/or NY-REN-34 gene for use in the
20 diagnosis or treatment of individuals having BCLL.

In a third aspect of the invention, there is provided the use of a polynucleotide sequence or a gene product of the CLLD8 and/or NY-REN-34 gene in the
25 manufacture of a diagnostic for diagnosis of individuals having BCLL, or in the manufacture of a medicament for treatment of individuals having BCLL.

In the present invention, the diagnosis of individuals having BCLL includes the determination of whether an individual is predisposed or susceptible to BCLL.

In addition, the treatment of individuals having BCLL includes prevention of BCLL, and prophylactic and therapeutic measures.

In a fourth aspect of the invention, there is provided an agent capable of influencing expression of a polynucleotide sequence of the CLLD8 and/or NY-REN-34 gene, or production of a gene product sequence of the CLLD8 and/or NY-REN-34 gene, for use in a method of treating BCLL. Preferably, the agent is capable of influencing the activity of the CLLD8 gene promoter and/or influencing RNA splicing of the CLLD8 gene. Examples of agents according to the fourth aspect include but are not limited to proteins, such as transcription factors, which may bind to the CLLD8 promoter or splice sites; antibodies or binding partners; ribozymes; and polynucleotide sequences.

Preferred agents for use in the fourth aspect include polynucleotide sequences which are complementary to the polynucleotide sequence of the CLLD8 and/or NY-REN-34 gene or a gene product sequence of the CLLD8 and/or NY-REN-34 gene. Sequence complementarity can be determined using conventional techniques available in the art. Preferred complementary, or antisense, sequences are those which hybridise under stringent conditions.

In relation to the present invention, "stringent conditions" refers to the washing conditions used in a hybridisation protocol. In general, the washing conditions should be a combination of temperature and salt concentration so that the denaturation temperature is approximately 5 to 20% below the calculated T_m of the nucleic acid under study. The T_m of a nucleic acid probe of 20 bases or less is calculated under standard conditions (1M NaCl) as $[4^\circ\text{C} \times (\text{G}+\text{C}) + 2^\circ\text{C} \times (\text{A}+\text{T})]$, according to Wallace rules for short oligonucleotides. For longer DNA fragments, the nearest neighbour method, which combines solid thermodynamics and experimental data may be used, according to the

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principles set out in Breslauer *et al.*, *PNAS* 83: 3746-3750 (1986). The optimum salt and temperature conditions for hybridisation may be readily determined in preliminary experiments in which DNA samples immobilised on filters are hybridised to the probe of interest and then washed under conditions of different stringencies. While the conditions for PCR may differ from the standard conditions, the T_m may be used as a guide for the expected relative stability of the primers. For short primers of approximately 14 nucleotides, low annealing temperatures of around 44°C to 50°C are used. The temperature may be higher depending upon the base composition of the primer sequence used.

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Antisense sequences may be useful as primers in any of the aspects of the present invention.

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In a fifth aspect, there is provided the use of an agent as defined above in the manufacture of a medicament for use in treating BCLL.

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In a sixth aspect of the invention, there is provided a pharmaceutical composition comprising a polynucleotide sequence, gene product or agent as defined above for use in treating BCLL.

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In a seventh aspect, there is provided a method of diagnosing an individual as having BCLL, or predicting severity of disease in an individual, comprising determining in an individual the presence of a polynucleotide or a gene product sequence of the CLLD8 and/or NY-REN-34 gene. Current diagnostic or prognostic methods are performed on a sample removed from an individual. Preferably, the methods involve obtaining a tissue sample from the individual; preparing from the tissue sample a nucleic acid or protein sample; and analysing the nucleic acid or protein sample for the presence or absence of a particular splice variant. Where nucleic acid is to be analysed, it is preferred

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that an amplification step be performed prior to analysis. A preferred amplification technique is PCR, although any other suitable methods may be employed.

5 In an eighth aspect there is provided a polynucleotide sequence or gene product of the CLLD8 and/or the NY-REN-34 gene for use in a screen for an agent which modulates production of a gene product of the CLLD8 and/or the NY-REN-34 gene in BCLL.

10 Preferred features for the second and subsequent aspects of the invention are for the first aspect *mutatis mutandis*.

Figure 1 shows the sequence of bA103J18.03548 which includes the sequences of CLLD8 and NY-REN-34.

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Figure 2 shows co-expression of the CLLD8 NY-REN-34 (ANGE) gene complex.

Example

20 It is of interest that CLLD8 is in close proximity (approximately 4Kb) to NY-REN-34, that NY-REN-34 has an alternate first exon without a promoter, and that high molecular weight bands were observed on Northern Blots of NY-REN-34 (as shown in Figure 2). In order to establish if CLLD8 and NY-REN-34 may on occasion form a single gene product, PCR was performed between
25 CLLD8 and NY-REN-34 exons in placental cDNA. A band was observed, indicating the presence with a gene with the domain structure CpGBD-PreSET-SET-PostSET-PHD-PHD. A similar domain structure has been observed in IL-5 promoter REII-region-binding protein (Garlisi, C. G. et al. *Am J Respir Cell Mol Biol* 24, 90-98. (2001)).

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- The coincidence of the BCLL locus to BCLL may be relevant, as B-Cells produce IgE. Mutations associated with BCLL have not been identified in any of the genes mapped to this locus. However the recognition that CLLD8/NY-
- 5 REN-34 form a single transcript with differential splicing suggests that this gene may cause BCLL.

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CLAIMS

1. A method of treating BCLL in an individual comprising modulating the
5 expression of the CLLD8 and/or the NY-REN-34 gene.
2. A method according to claim 1 wherein the production of a gene product
of the CLLD8 and/or the NY-REN-34 gene is modulated.
- 10 3. A method according to claim 1 or claim 2 wherein the activity of a
CLLD 8 regulatory element is modulated.
4. A method according to claim 3 wherein the regulatory element is a
promoter.
- 15 5. A method according to claim 1 or claim 2 wherein the splicing of the
CLLD8 and/or the NY-REN-34 gene is modulated.
6. A polynucleotide sequence or gene product of the CLLD8 and/or the
20 NY-REN-34 gene for use in the diagnosis or treatment of individuals having
BCLL.
7. Use of the polynucleotide sequence or gene product of the CLLD8
and/or the NY-REN-34 gene in the manufacture of a diagnostic for diagnosis of
25 individuals having BCLL.

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8. Use of the polynucleotide sequence or gene product of the CLLD8 and/or the NY-REN-34 gene in the manufacture of a medicament for treatment of individuals having BCLL.
- 5 9. An agent capable of influencing expression of the polynucleotide or gene product of the CLLD8 and/or the NY-REN-34 gene for use in a method of treating BCLL in an individual.
- 10 10. An agent according to claim 9 wherein the agent is capable of influencing the activity of the CLLD8 gene promoter and/or influencing RNA splicing of the CLLD8 gene.
11. Use of an agent according to claim 9 or claim 10 in the manufacture of a medicament for use in treating BCLL.
- 15 12. A pharmaceutical composition comprising a polynucleotide sequence or gene product of the CLLD8 and/or the NY-REN-34 gene or an agent according to claim 9 or claim 10 for use in treating BCLL.
- 20 13. A method of diagnosing an individual as having BCLL, or predicting severity of disease in an individual comprising determining in an individual the presence of a polynucleotide sequence or gene product of the CLLD8 and/or the NY-REN-34 gene.
- 25 14. A method according to claim 13 wherein the method comprises:
- (a) obtaining a sample from an individual;
 - (b) preparing from the tissue sample a nucleic acid or protein sample; and

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(c) analysing the nucleic acid or protein sample for the presence of a particular splice variant

15. A method according to claim 14 wherein an amplification step is performed on the nucleic acid sample prior to analysis, e.g. PCR.

16 A polynucleotide sequence or gene product of the CLLD8 and/or the NY-REN-34 gene for use in a screen for an agent which modulates production of a gene product product of the CLLD8 and/or the NY-REN-34 gene in BCLL.

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FIG. 1

bA103j18.03548

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1   gattctttaa aaattattta aaattaagag ttataagcaa ttctaatctc
51  atctaatggt tcaactgaag ctgggctagg acctgggtgc taattttttt
101 ttttaacgat caaagccttc agagccgagt ggccagctct ataactctag
151 gccactagaa aactgaattt cctgaatttt ctgaaaaagt ttttcaagta
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251 ggatgtagta aggcctctaa aggtcaagtt atcttgagct aagaaccttt
301 agalactttc actttcagct tatctccttg tttttgaggt ctttttatag
351 gtaaaagagaa atcaaaacag cttctatctg gctccgttaa ctacttttat
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451 tgtagtcatg tttcttccct ctcactctat ctgggtgcac ttctgcccta
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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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6501 tgtgtgtctg ttgtctggtt ggtattcagc ttggaaaaaa caaatacatg
6551 aaaaacttgg agaaaatttt ataaagataa atttgagaat gatgctcaat
6601 aaccatacta agcagagata gaataaaaat aattatagac cgatttactg
6651 ctccataaat tatgtgtgtg aggcacacatc ataaaaatgt atctgcgtgtt
6701 taactctactt tctaataatt acttaactca aaaaagtgtg ccattatttt
6751 attattagag actcaataac caaaatgaac ttaaaatgta ccattgatat
6801 aaagacataa tgttctaggg atgtatgttt attaatgagt gatttttttt
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6901 cgattggggc tcactgcaac ctctgcctcc tgggttctgc aacctctgcc
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7051 ggggttttacc atgttgacca ggctggcctc gaactcctga cttcgtgac
7101 caccggcctc agcctccacc agtctctggg ttacaggcat gaggccaccg
7151 acccgcccaa gtgatttttt ttttttaaat gaattaacc aagaatggtt
7201 tcttggatca ttcataaatt ctgggttttt tttttgaat gaaatttaat
7251 gcaatgaaag tattcttttt taaaaatgaa atataggcat ttgttgaaa
7301 atgaaactaa tgtgcaactg agtgtgagtc ctgcccaact ggcttgtgct
7351 ccagttgctt cattttatcc agtaagaaaa tctccctgga ttccagaaaa
7401 gcaacaacac atagacatgc acaaaactct gttctactat agcattttac
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7501 tgtttaaaaa gaatgttaag tatgaacctt aatatgttgc aagtaagtaa
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7601 gttgccaggc ctggagtgca gtggcacgat ctcggctcac tgccagctct
7651 gcctcttggg ttcaacacat tctcctgcct cagccttcca agtagctgtg
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7751 agactggggt tcacatggtt aaccagatgt gtctcgatct tctgacctg
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8301 agtattttaa aacatccctc ccttagaagag atttatggat ccttttggag
8351 aagatcaaaa atattgccca ttaaattgtt ttggaagtgt ttttttctt
8401 tagttatgga aagaaaagga aggaagggtt tcattgaagt tcttttcaag
8451 taacttgctt tglatatagt agttgcacag tacatgtctt tctttgtcta
8501 tgaaaaattt gaggttttat ttaattgggt tttaactttt tticagaact
8551 ttattctctt tttgttgaca atcaagtaca atttcaaat atcagtgcac
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FIG. 1 CONT'D

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8601 tattttgttt tatatttatt ttctttacca aaagcaatct gattattttg
8651 tttttgggcca tttttgtttt ctttttgctt ttgtttttggc aggtctctga
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8751 ccagatttaca gggtagcccc aaagcaaaag aaatacagtt acgattggggt
8801 aatttccatt ttgttaataa attataatta agctagaaca ggaagtattc
8851 gtctttgttaa attgcattaa tctttccatc ttttaggacc cccctcggtt
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9001 tgagcagcct tcttctggga aagacataca gcttcagact acgtgcagct
9051 aacaaaatgg gggtaagaag actgtgctgg tagaattata atcaacaatgg
9101 tgatatatgt ttcattttaa catatatcat catatccatt atttggccat
9151 ttggcttttaa catatgactc caaattttac aatttttaac aaagctacat
9201 tgataaatac aagagaagtc ggtatatccc ataacttaat ttttatgaaa
9251 tctcagttatt tttagatccc acttacagtt tgtgacactt tggacttcag
9301 ctgggctaga gtttaacctt taggcagttg taatagagtt tacttaatca
9351 atttaagagt agaaaataaaa tcaataagta tgaagttttt tggaggctgat
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11051 gctcagcctc cctgagtgc agggactata ggtgcacacc accataccag
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11351 actttgggag gccaaaggtg gtgggtcact tgaagtcagg agttcgagac
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FIG. 1 CONT'D

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11651 aattttggct aggcacagta gctcacacct gtaatcccaa tacttggggg
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11751 caacatcggg aaaccccata ttactataaa atacaaaaat tagctgggct
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12051 acatgaataa tttattttca agatggtttc aagattactt ttccaaaagg
12101 aggcgcatta tatccacatt ttgctctgcc ttgtaaaact gccatctggg
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12201 ctatagctac aggtttgttt ttttttttc attgcttcta acaggatata
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14101 ataaacaaat ttatagaaca gaatttgggt aaaaatttat atggaatatg
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14201 ctaccatctc ccgtaccttt aattagatc aatttcttca ctcttatat
14251 ttctctgaa tatttccacc gacctcattc cctaatgtcc tgcccttctt
14301 acaaaaacca ttctctgaag aaataagggg cagaagaag tataggttaa
14351 tgaacttta aaatttctca caccattact ttcatgattt ttaagttctt
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FIG. 1 CONT'D

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 14451 cagggoaaaag accttatttaa tgaactctta aatatgcagt tctgtgcaat
 14501 cagtggaacat ttaagggtga aaaaataaaa cactagttaac atttgttttt
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 15701 agcctgtgtg actccacatc cagttcctgg cattgtgacc tgctctcaag
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FIG. 1 CONT'D

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19751 ccacagttta tacaanaatc tataggcaag cccaactcta ctgagagtct
19801 cactcaataa taaaagctgt ttatctggc acgctcatai tcagacaaat
19851 actggctttt gtcactgat tttttaataa tgtagcataa aaatactaaa
19901 ttgaatagga aggcgtggtt tctaagtgg tcaattgtct aaagaaaaaa
19951 atcaaaaact ctggttgttt aaacgtttg agttatttgt attacattca
20001 ttgtgatttc agaaggaaag cttggtcatc tgttaagcaa acaaaattct
20051 tcaattaatgt gggtttttca attagtttta cacacacatg tacacataat
20101 tacacacatt tgtatatata ttatctttt aattttagag gggttcttat
20151 tttaaagtga cctcggcaag ggctacactc taattttagc tgaaaagtct

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FIG. 1 CONT'D

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20201 ataaagttaa ttgctctgaa gactaatcac agagacttct agaaccatat
20251 cctagatcat gtacttaaac ctatcatctt ttaaacacga gaactctctc
20301 tgactagtct ttctaataat attgagtttc actgagtcac tttctgtttt
20351 gctcatcaag tttagtgtct cttagcttta agaagagatgc tgactataag
20401 caggggcacag tggctcacac ctataagccc agtgctttgg gagactgaag
20451 tgggaggctc acttaagggc aggagtattg agaccaacgt gggcaacata
20501 ctgagacctg cctctctaca aaagaatttt tgaatcagct ggcatggcca
20551 gcatatgcct gtgtgtgtag ctgcacagga ggctgaggct gcattgagct
20601 atgatcgcac cacgttgtc caggctgggt gacagagtga gatcccatat
20651 cttagaatac aagagtgcgt attttaacct ctttggatgc aaatttcaaa
20701 aattcactga tacttatttc aagtttataa gtggatttta aatatgttgt
20751 gatttttatt aagacaagtg tctgcatgat gtaccaaat aaaaatcaag
20801 tgggaacagat attatttata tttgtttcct acagccccc aatatagaga
20851 agtaaatgat cacatttgtg aaattacatg gtagtgttta cagccaatga
20901 aaggtgatcc agttattttc agtcttcaag ttatgttggg aaagatttca
20951 gaattcaaac aggtatgtac caagatatta atgtgtggat gcattatttt
21001 accctttttt aatttttatg tattttcagt gtaagatttg gccatcttta
21051 ccttttaatt cataaatttt tattcagtat atattatgtt ccagagatct
21101 caagattcca aactttttca gtatgaacta cacttgaaca gattattcat
21151 ttatctgata agtattcatt gaattctgtg ccaggcactc aggatatagc
21201 actgaacaaa aagtccttgc cctccatgga gcttacttac attctgggtg
21251 aaaagaagac actataagca agtaaacatg acatataatt gtcagatata
21301 agtgtaattg agaaaaaaca aaatttgata aaagaaatag ggagtggagg
21351 gggaggggcac tgagtggtat ttcattttgg gcaactcagct gacatttcag
21401 catggcccag aggagatgat tatggagaga agagtgttcc aagaagatac
21451 gctgaggcag gaacatgcct attaaactct atgaacataa aggaaccaat
21501 atgactggat ggagagagca aaggggaagag ttgataaagg cggaagtta
21551 atcctaaggg gcctataggt ggtatggagt gacgtaagcg ataataggcc
21601 atactgtggc tttaactcca cgtgaataga gaagacagtg gaggattttg
21651 accagggtat tcaactgata agacacacag ttgttttgac tatagtgttg
21701 aaactacagt aggacaaggg cagaactaga aagactaata agggagcttt
21751 tacaataata gtattaataa tagtcataat gcagtgctgt aaatatgaca
21801 tttaggcatga agttataatg gaaacctaga ggaattgtca ccttctagc
21851 caagagggtt caaagatagc ttctgataa agcaagaata gcagtgagat
21901 agagtggagt gttgccaatg ttgtttacaa cttttaaaaa gaataagctt
21951 ttataccact ccaaaagacta attaaatacc tatacatttc acctgatttt
22001 ccttttttcc tgtaacctta attttgaggy cttttaagct ggggtgtttt
22051 cattgtgtct tatattttcc ttctccacta aaaaaaagat ccttcatttg
22101 tttttttcca gtattgtgct attgtaacca ctctatgtaa tatcttaact
22151 gaaattacaa agatccaaa gagtcagatt aaactcgcca tgcgaattgt
22201 tttctttatt aagccatctg caaattgaca ggataattag atttgaagt
22251 taattttacag ataagtaggt ttcttctaaa ggagggaagca aaataatat
22301 taaagaaaaa ataatttgtat tacacgttta aagggaatat ggattccaca
22351 tttgagtagt atatgaataa ccttaaggct tgtttgaatg acctttcttg
22401 ggtgtataaa ccttctgaaa ttagcttgag caggttaact tgtttctctc
22451 agtctgtat ttacagttac ctgtgtctct tctgtcttag aggttctccc
22501 acactgaaa tacaataatg aaaaacttgal cccatcaact tcccctccag
22551 tatctctctt ccaacatctt tacttcatca gtgtcataga caccaaatc
22601 atcttgggtc ccaagcttta aattctttag tgaatttttt ttctctatca
22651 actcttaatc agaatttgtt tctaaatcca taaaactaca tcagggcctc
22701 atcaactttt acatgtacat caagagctcc tgctcaactc agtccctct
22751 agtctctcac acagctcac gatlaggatt ccaataaacac tgttttaagt
22801 tcacacacct acagtgttcc cttttgaatt aaacctaaatt tccaactagt
22851 gtaattaatg tattcttctc ctttgtacca gatctcttat caccctcatg
22901 ccaatttgtg aggtttttct ttcttaacct aactactgcca ggctcatgga
22951 atggtatatg aagacacatg gaaagtataa agacaaaagt catctattat
23001 atccataaga caaatacata tttttaattt ttactcaatt tacttcagtg
23051 ttatgtatac aattttacac tactttatca tacaacattc tgttttaagt

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FIG. 1 CONT'D

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23101 gaatccttitt acaggttgaa gcatcccaa taaagtccaa aattcaaaat
23151 gticcaccaca aaatctgaaa cltlttgagg atcgatalga cactcaaaag
23201 aatgtctcat tggagcattt ccaatttcag attttgggtg ttggaatgct
23251 caactagtaa atatgcaact attccaaat caaaaaaatt gaaatgcttc
23301 tgggtccaag catttcttat aagggtatacc caacctgtac catctccaa
23351 acatggatca ttctacatt ctattccctg aaacattatg catcctttag
23401 actaagtgtat agtcaccatt ttcttccaga ttatctctaa agcttcttct
23451 agtaagtctcc ttatatattt gttatcagca tccacatttt tatttattgc
23501 caataattca ctaatttaat gtccttttat taagtaccta ctatatgcta
23551 gattctggag acagaaaaat gagacagaga tcttacttta ctttgagagc
23601 aaagcaatat gtaaaaattt agatttacct cacagytaca attgaggcag
23651 ctaaaagtac ttgaaagccc ccatgtgttg gttcttctga cttgtagccc
23701 accaactaac tggagaaact caactgacaa gtcatttaac cctatgaacc
23751 ttggttttct caattacaga atgagtggtg ggaggttgct cattattgga
23801 aatgatagct cctacagatt gagcagtgac tgcattgctga gcactgcgct
23851 aagtgtctta acaagcata gttcatttca tctctataat tatcatcat
23901 gttaactact agtatgtctg ttatactaag gtatgttgct taaaatcaca
23951 tctggagtgt gaagtggtag agcagacctt ggatgccagg ggtgaacagt
24001 tctgatatat agcttcttat ttatgcttag tgttccatta ttggaacatt
24051 aagcttggtg tagttattta tatctcact atcaagggtta ttgccaaagt
24101 ctgatttttc acaaaaaaaa aatttgcaac ctctggcata aatgggttaa
24151 ttactagcac attcctctga aaactcgtgg aaatttcatt tttttatttc
24201 cctgtgagg catggcagag gaggtcctat ttcttgattc taagtattc
24251 cccctctctg gtttatacag tgatttgcca taggcaccta tagaaagctc
24301 cccattattca ttctcattt catgtacag atatgtttga aattatatgg
24351 aaattttatca gttatacaaa gacataatgg gggaagcaaa agtagacact
24401 atcccttctt tgatggaatg attgcattga aaaaatgact cttacatttt
24451 agaaaagcaa gaaaatgctt gaggaacgat ttgtctgttt ctttagctgc
24501 cctggggcac atctgcactc ctttaattcat ctgtgaacgg tataagggtta
24551 gatcctcgct ttgaaatttt ctcttgcctc tatgcaacaa acagataaagt
24601 actttaatgg acaggtattt ttaacatgtc attttaaaga taaaatcaat
24651 ggcatttcaat ggctttcaca tgaaaaaaaa ttctaacact agccagtttt
24701 aacacatttt ctgtccagcc ttcacacgta attcttctct ctaatatatt
24751 attaacagat ttacaagggt cccgactctt ccttccggtta ttccagcctt
24801 cagctgaact gtgaatatcg ctctcggtga tgtgccattc gccagtgcca
24851 agactctctg ggacaccagg acctcgtagg tccctacagc accacagtgc
24901 tcttcatctc tcagaggact gaaccaccag ccagacccaa cagagacact
24951 gtggaaagca caaggaccgg acgggcactg agtgacgagc agtgtgctgc
25001 cgtcatcctt gtgctgtttg ctttcttttc catttgattt gccattatca
25051 ttcagttactt tgtaatcaag tgaaaatata actttatttt ttaactctat
25101 tacattttat ttgtcatgt actaaaaatta ttctgttatt gccattataa
25151 aaaaacagtgg catttagcac tggcatttag actatagcac atcatttttg
25201 ccattttcag tgcttatatt gttaggtaga ggctggcact ttattagaat
25251 gcaagccaca aaaatatcaa tttgtttttt ttgttagggg tgggtcttct
25301 ttttttctt cctctctctt ttttttaaca aatgccttct tatagaaaaa
25351 cttcttaaga ggcacaactt tttgtttttt ttgttaggg atcggtcatga
25401 gtgtaacagt gataacctga tctgtttgtt ttaaagatta ttaccaagtg
25451 aaaaattcag aatgaataga atttacctat acatgtctata taaaatgta
25501 aagctgtgat cgtgaaaagc attctagtcg tatatttcta cctcctcatt
25551 tgtcttaatt atttggttag tgggattatg atgagtaact ggaaggggctt
25601 agaaacaaaa actggatgaa agagtatgca tgaagaaaag cttctttgat
25651 aaatgtggag ttcttcatta taaatatata ttcatgaatt cacagataag
25701 tacttaauga acagacagtt tacttggcct aaaaatattt tgatgtttac
25751 tcaaaaagta cctcttcagg tcttgagaac atggaaaaga attgagtgtc
25801 tttaatact tttagaagaa taatcataaa agtaaatgta atttcaaacc
25851 tatttggtct ctgtttttgt aacctttgaa ctatatgtat gtgtataaag
25901 gtatacacat acatatatgg catatacaaa gtgtacacat atacacataa
25951 caagtgtaga agtatatat acatacatac acctcactct tctggtatag

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FIG. 1 CONT'D

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26001 gctaattttg aagaactccc ataagtttct gctgcttctc ccataactgc
26051 tgcccaccacc atcagaattc ataatcaaac ctaaacctttt tgmttggggc
26101 accaaatctg aagacaaatt taatttgcac cagtaaaactt caagctgctt
26151 tctttcttga aaactaaacg tttaacgtat aatgtctggt ttgatactgt
26201 tccaaattgt tgattgcatg tggttaatgt tgcattagag cactttgcga
26251 ttgcataatt cattaatggt ttgtgagctt gcatttgta gttattggat
26301 gatcagactg aattttgtca agtatcacat tgtacatctt gcctagatgt
26351 cgtatgactgc aagtaataat acagtttata atgaacctat ctacaattct
26401 tgttttagca catctggtat ccgtaaaaca cctgtaacta gcttttttaa
26451 ttattatttt gaattttagg atagcgaatc actaattttt agttgctgag
26501 gttggcattt tagtgattat taagcacttc tgtcagttct tgaaaaaaga
26551 acgtattttt tgtgctttga agatctctga agaatttctt ttataataga
26601 atgggcatgt attgtaacag ttttatgtca aatgatctgt gctgtagaaa
26651 aacattaacc cttgttcaaa aaagaaatgg ataaacttgg cctttctaag
26701 tggtaagaat gacctgtcac tataatacac tgtatgttta cattttattt
26751 aaattttaact tcttatgtat aggggtgataa ccttcccaga aaacaacagt
26801 gattgcgatt gttttctaga aacttcttta aagtcccaca ttgggcagta
26851 caaatgagtc tgagtgtaat agcccagaga ttatatata gttgaatgtc
26901 taaaatggta aaatgtacca ctgtgtcaag ttacagtggc ttatgttttt
26951 catagttaatt caaatgaaat tctatttttt gatagtaaat gtcatttaatt
27001 agtactactg ccatttgagc ctcaactgca aattagtcca gaggagaataa
27051 caatttttaa tgaatacttg attttacctc atatactgta catccaaaa
27101 actctaaact ttttaaagat tatagataca ctaccaaaaa tatcaactta
27151 aaattgtata aggcgtgaat aactctatac aaatgaaaaa aatctcataa
27201 aaatacataa actatgtagc aaaagtatct gtaaaatcca tggaaaaataa
27251 aagttgtatc attctttttg agatacgttt attgtattca tatataatca
27301 ttatttgcta cctgtttaag aaagtgaatt gttatggtct cccctcttcc
27351 aatgagctta aaacattttt cccaacagta tataattctt caacatgaga
27401 ggatgtatat ttattatata aagcccagta aagaataaaa ttagaagttt
27451 tatcctagtg acttgatttt gtgcaactca tgaatatctt tacttctttt
27501 ccacatataa agaatacagt gagtctaagg taaactctcc agtgggaaga
27551 aaatccctaa cctctccttg cctttcccac atccctattt tctagtacct
27601 tctttggccc accaccagag gccccagaacc ttccctggtg tggcactgct
27651 gggctcgctc tccaccagaa aatccaacat tctctcactc atccccattt
27701 aaaatttcca tcccagaaac ttccctcctg ggaatggcac tcaagtgcctt
27751 tttttttttt tttttttaat gggtgaagcta gtaaatttta tgtataaat
27801 attttaccac cataaaaaaa tcattgaaaa attcaactga gaagccaata
27851 tggaaagagg agaactcaat gtttaaaaaa aagccaactt ttttttttta
27901 ttcaagaggt aagtacatag cttcaagctc aaggtctagg ttgaggacaa
27951 tcataggtcc tattaaaggaa caaccagttt aaagaacact gtcaaggcaa
28001 ctaccacgta gctctccttc actccaggctc tagctgttcc agacttccca
28051 gtactgatga aggatcatgt ttttgttcag cttggccagc tgcgttcaat
28101 cataatagat aaatgaaaaa tcccagaaac ctgttgtgtt tgggaaggtt
28151 ttcttttgtt ccaggcttca gtggttaata tgcttgacaa atttcagagt
28201 ctctatctct gtatgccaat gccaaagaat tgcttctctg attcaactgtt
28251 agcagctctt gctcttcatc ttggccaatg taagaaaaac accatatctt
28301 ggccccccag cttcacagcc acagtgagga attaaagtta gggcaaaatc
28351 agccttgcca tggtcacgaa ttaaaagtgt ggtgaccagt ctccaacgc
28401 ctcagttccc ttggcatgtg ggggaacacct gattcatctt ttgtttcaat
28451 ttccctgac tcggtctgtc tgctcatggc tctgttgccc gttgtgctgc
28501 atggctgctc gattattctc tggctcagga gggctatggc cagtcccttc
28551 ctcagttcta tcagcagcag aggctgctgc ttcccttttt ttgtcatcca
28601 tctcatcttc cgaagggggc aagaagtga gcttcaggcc tgtgaagtgg
28651 gagagcagca agaattagtc ctcagagcaa aataactcca tgcaactctt
28701 caatatatca ggaagcttac tctcctcagc ttctcatag aatcatcttt
28751 tgtggccag gcacggtggc tcatgcctat aatcttagta ctttgggaag
28801 ccgaggtaga caggtcacct gaggtcagta gttcaagacc agcctggtca
28851 atatggtgaa acccctgtct ctactaaaaa agaaaaatta gctaggtcag

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FIG. 1 CONT'D

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28901 atgccaggtg cctgtaatcc tagctactcg ggaagctgag acggggagaat
28951 tgcttgaaac caggaaaacgg tgggtgcagt gaggccagat ttaaaattta
29001 aaaaatgata ataaaaaaa aaaaaccttt tctagggggg acctcaagtc
29051 ctctcttcca catctccatt ctccaaggcc tcacagacct ttgcaaatct
29101 ctcaggctta agaaatttct taggagaatt tcagaaactt ctccaactc
29151 ttcttgagtt tgaatttggt aatccatgtc cagataagta aggttgatcc
29201 aatcaaacaa ttctcatgtc ttgtgggtgt tgagggctcc aagatatgag
29251 ggggttcaaa gtatgtggga ggcctagtca gtgaaggacc atgaaaacc
29301 ccacttatag acaaatgtga ctctagacag gactttggac acctggtgaa
29351 aggacactgc agatacttca aagaaaacca gtttgttcca taaaggggta
29401 agagacgaca atctgcttcg gttgaaagtg ttcatcaatg ttgtacaggt
29451 ccaggatacc ctccaggctc ctgtcccagg aaagaaccag gtacaggata
29501 aaggcgatcc agcgcccttc tagtcatca tcatggcaca gcagggcac
29551 agtgaattca tatttagcac aggcacacat gatggttggt tccagtaaat
29601 tttagaaatg ccagaaagcc aggaccagaa atcttcaaac agaattttcc
29651 ttaaagcaga gatgtgagcc cctctctttt aaatcatcag actgctggaa
29701 cttacataaa ctattatact tgtcatggaa atctaagttc ataaatttcc
29751 tctgaagccc ttccaagaag tctgcttttg atgaagtttg ggcacatgca
29801 gtgaagcaac ggggtccatgt cccgtgacaat ggcctcgatg ctccaggcct
29851 caaccacctg ctttttcaag gtttctccca tgacggcatc tgaaaattcc
29901 gccatcacct ccttctttcc cttttttccc accggggtcc ggcggggctc
29951 cactggccgt ttcactcctt cacaaggtac agagccacgc catatgactc
30001 agtgctttta aaatccatgt agatctctta attgccacaa ctccaaggac
30051 cgtgatagag tttaaaatg tgggctgggg aaggagagtc cggaaatagg
30101 aacatcacag aagcagctaa gcatgagtc aggtttgagt ggggtatgat
30151 actgatttga cagtatgatt gcaogtcacc tctttttttt ctgtagatgt
30201 gaaataggag tcttttgcat cctgtttgag cattccatgg gtgtgtttcc
30251 aacacaaatc ccttgcttct caccattata agattatttc tgcaggaaga
30301 ttcattgac gtggtggctc aaggaggcaa acaggcttca aaagaaaaa
30351 ggcggggtgt ggtggctcac gctgtaatc tcagcacttt ggaaggccaa
30401 ggtgggcaga tcacaaggtc aggagtttga gaccagtctg gctaactagg
30451 tgaaccctcg tctctaccga aaatacaaaa attagctggg cgtggtgggt
30501 cacacctgta attccagcta ctcaggaggc tgaagcagga gaatcgtttg
30551 aacctgggag gcggagcttg cagttagcca agatcgtgcc actgcactcc
30601 agcctgggtg acagagcgag actccatctc aaaaaaaaaa aaaaaagaaa
30651 atattcccc aaacttaagc agtgattctg taacctaaact cccatcatca
30701 aaagagatga tgcctcatgt ttttagagag tttttaagtg ttctattttc
30751 atatacattt tgtaagtata tgccgttgag aatgtgtatc cctttgtttt
30801 atttatcatt ttctctctga tgctcctaag gcgggagaaa aaacttggag
30851 gaaaaaagaa aaatcaacca aagaaccacag atttcaacaa ggtggtcatc
30901 aaattctctg tccagagtggt ggccttcaaa tgttttagat ctgtaatggc
30951 tattttttgt ctcataaaag gggctattgt gccatttcca cttaactcgg
31001 gaaatttgcc aagagaaaaa ggtttcaaaa ctgaacagat ttgaaagcca
31051 catggcccat tcaaatcatt atggctagga tctgtcaacc atttaattgt
31101 ttgtaagcat tatgttcagt tctttacctt gggcatctca tacagtcctc
31151 ttaattgtct tagtaagcat tatctgcagc acagagaagt cgagctctct
31201 gccacaggtc tcatggctaa taaatgatga agctggggtt tgatccaggt
31251 ctggggctcc cacacttgac cactatctct tctgtctcgg cccaaaaatt
31301 caaaactcta ggaatcaaa attaatatga attagcttta atagtcgctt
31351 tatgatgaca ttatttgatt gagtaccacac tgtttgctag gcaatgtgct
31401 aagcacttcc tcatatgcaa aacaagccac agccctctaa ggactgaaca
31451 gaaagaaatc agatgagaag aatctggtat aagcataaca gactaaatga
31501 gaaaccttaa ttcttttctt cttgaaattc atccctgat acttttacta
31551 ccaatttgag cccacactca atccttaagg ctacgccatc ttaaatatta
31601 atccaaggat gaaaacgcga tttttgccac ttacgcgaac taagacaagg
31651 tgacattttc aaaaatgaat atagctacca tgtggaccaa cctcaaaaac
31701 acactacaat gaaggaagcc agacacagaa agtcacatat tatacaattc
31751 catttgtatt aaatatccag aatgagtaaa tccatagaga cagattagtg

FIG. 1 CONTD

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31801 gatgccaggg ctggaggagg gaggaaatgg ggagtaactg cccagtgggt
31851 gctgggttga tggaaatgct taggagccag acagaggtag tggttgcaca
31901 actctgaggg cactaaatgc cagtaagttt gtcacttcag aatggttaat
31951 tttatgtgaa tttcactcga attgcttaag aagggaaata aaaacctata
32001 aactgataca caggttaacat aagactagag aatcctgggc atcaagtcca
32051 taaaactgac gtatgcagta agtctatttt gctaaggaca gaggccaaat
32101 tgtctctttt ttctcaaaat cccacacctc ccaggatgct accactcctt
32151 tcagcctgtg acatgtgcct ggccttaaca tgaatatttt atggatgtcc
32201 ttgagtgiga ttaaacaaat tcgcctgccc acaccaagt tatcagctct
32251 atctcattct taatcctctt aggatgacac agaggtctta aagaagaaat
32301 taccctttca gtttcacagt taatcaatgg cagcagctgc acagtaagaa
32351 tgctcgatg cagtagtgta aggcctataa cctcttccca cccacgcttc
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32451 gagcctgtct gtctctcagg agaactggg actaaacaga aaactgctaa
32501 agcaacagcc acagagtaac aggaatctgc actccacaaa agtcttgctt
32551 gaatttgccc tgcggtgtcc ctgctgtgta aaaagaaaaa ctaggaaaga
32601 ctgagccctt ggtcaatgtg ctgccactct ctgccagggg ctcccttcca gggccagctt
32651 atagctgccc ttgaacttct ctgccagggg ctcccttcca gggccagctt
32701 tgtctatctt gcaatttaact aaagatacca ttctctggtt cctggggtct
32751 agagggacca gtgggtcatg tgaatgagga aggggctgag tgtgaagcca
32801 cagatgccct gtgtgtgggt acagctgtga ggtgectgca gagtggccac
32851 agcctacagg ctgcaggtag cagtctttgg ggaacatgag ctcagagctg
32901 ccacagcttc cgtttttgca acatcaatgct tcccttctca accctccac
32951 ctccccggtt gttaccactc ctctcagcct ggggcaagtg cctggttatc
33001 aacaatattt tatggatgct ctggggagct attaaagaat ttggtctgcc
33051 tagggcccaag atatcatgct gacaatctgg aactttacct gaaatttccc
33101 aattgtaaaa ggttggttca aaacattatg aaatggccag gctccgtggc
33151 tcacatctgt attcccagca ctttgggagg cagaggaggg tggatcactt
33201 gagcccagga gttcaagagc agcctgggca atctagggag acccccatct
33251 ctacaaaact catgccttgc ttatatgtgg ggaaaagagt gtaaagcctg
33301 tggagtgttt acaagtttac ataagtaaac tattgtacaa gttcaggatg
33351 tatttttttt tttttttttt tttagacggg agtctcgctc tgtcgccag
33401 gctggagtgc agtgggcggga ttctcggtca ctgcaagctc cgctcccg
33451 gttcacgcca ttctctgccc tcagcctccc aagtagctgg gactacaggc
33501 gcccgccact acgctgggct aattttttgt atttttagta gagacggggt
33551 ttacacgttt tagcggggat ggtctcgatc tctgacctc gtgatccgcc
33601 cgctcgccc tcccaaagtg ctgggattac aggcgtgagc caccgcggcc
33651 ggccgttacg gaggtatttt aatgctcctc acaactttcc agattcttca
33701 atttgcctat aaaatctggt ttctgagaaa gacctgga gacactttcc
33751 tagcagaatc cagatcataa cttagcatc ttctgacgtg gtgggtgctat
33801 ggtctgtata gcaagaggcc acccagcaca gtagttagtc ccatggactc
33851 tggaaagtga cagcacccac cttactggct gtccagtgta cctggggtca
33901 ctctctctgt ctttctctt ctcatctcta acatagagat actaaaaaaa
33951 cctgctgctt tggactgctg tggaggatta aatgattcca gatatgaa
34001 tacttgaac agtgccctgc acacagcaag cattagcttt atattcatcc
34051 agaccatccc ttatatattc tcaaaagcca acaagttagg cctccagccc
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34151 gccgtagctg ggccaaacct agacccaccc ttgcccacca tgaattacag
34201 gtggagaggt actcaaaag taagaagaag agacgcccat gctccgggtc
34251 tactggaaac ttctcttccc ttctcgtaga ttaactatga agtcaggaa
34301 ctgggtgaat tctacagaaa cacaaaagta aaaaacagat tggttccatt
34351 ccttctctaa acattggaat ccaacccatc atagagcttc agatatgtcc
34401 taagggccaa gtatgtttg aaacctcagca tagcaattgt atcaaaaaa
34451 ccgctggggt ctccacctct ccatatcagt attctgtctt aagctgaagt
34501 atcagtgact acttactgag caccactac aatcagagca ctgtttaac
34551 ggctaggaat tgtaagaaa acaatggtac ctggttctac agaagctcat
34601 tcatctccca agttaacaaa tatttattaa attctcaatt tgtccaggc
34651 actaaggaaa cagcagtgaa cacagcagat taagccctg cctctgggtg

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FIG. 1 CONTD

SUBSTITUTE SHEET (RULE 26)

WO 03/000296

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34701 cacataatgt tgggagatag agatagataa taacaacaata gctaggttaa
34751 ttaaatagta tgtcagttga taataagcaa tatggagaaa ataccataga
34801 gaggggagtg ctgaatggag gtgagtaatt ccaacacgcc aggatgctga
34851 ctgcagactc agtgaqctcg cctcagcgcc accatggtgg gtggggagag
34901 gaataaggga ggcttcacga gactcaggga ttgcagcccc atgagagcca
34951 caaatgggaa aaaccaaagt gactcaggga ttgcagcccc atgagagcca
35001 tggggagaat gtcaagtgtc cctgatagca tcacctgagt ccaagaaaga
35051 agctacctct tcactagcca caggcccatg cgccccaggc tagcagagcc
35101 actggtgacc aggcaggaag ggaacatgga actggagtc t agcaaatgcc
35151 agccccctgac accccaggag ccggcggtgaa gcttcataag gacctctccc
35201 tctagcttta agccactgac ccctctcccc gtacacctgg gccaccttga
35251 ggaaaggcat gatgtctgag agaagggaac actgcccaga ggggtgctgt
35301 aactgatccg cctggatcat gccttaccta ggctagagca ttcatctctc
35351 ttgttgagag cacaggggaa aatcaaatca actataaatg aagaattac
35401 attttctctg cctaggggga ggagacaggg aggaagaaaa agtggaaact
35451 gtgagtcacg aaactatttt gaggagtttt gcaatgaaat gatccaggag
35501 agaaaaactg atgacaaggag agagagaaag agaattgacg cagtgatgtc
35551 tggaggagga gaaaggagca cttaaggggc agagctgact tcagctgc aa
35601 gtaccaccaa ctgtcccagg gtagcacgag cagagctggg ggtgtggtag
35651 ttatcttcaq agaaacaggg tgcaaggaaa cctcccaagg gaagggttgg
35701 tgggtgttgg gtctaaagag agagaggggg gtataaacca gcagcctgg
35751 ggtggagag tgaatgaggt caggtgagag ttgggaaggc cggggagaga
35801 aagcaccccg cttagaggtg tgctttcaag tgaacaacag ccatgtgaca
35851 gcagccaagg agtaggcagg gaattcggct taaccagggt ttggtgtctc
35901 ttggtggatg gacgaggctg acaatggaga aaagagcaag ggagtgcagg
35951 cgctctgtgt gggagtgatg gcgactcgcc gtggaattta cgttgggtaa
36001 aggaagaaag tgaagacctg gggcaggcaa gggacgggga aaaggaagga
36051 ggagccagcg atgaggtcg cagtgggttg aaggattacc ggaactgagg
36101 tctaggggga agagagctaa aaagagagcg gccgaggtc agaaagaggg
36151 ctgactgaag tggaggtgga ggaaggctgg caggccaacc tgaggtgtaa
36201 gttccgtcga caggcgcgcc tgagatcggg tggagagcaa ggtcataggt
36251 ggaaaggagg tcaacaaact agaggccaag gcattccaag actcggcatg
36301 ggtgtgaacg gccgcagatg cagtgtctca aaagagagcg aggcacctgt
36351 ccctcaggga ctacgggtga ccacggagga aagcgctagg gagggcggtt
36401 ttaggaccgc tggaaacagc agcgatgagg gaggcgacag gtgtccctcc
36451 tccaagctca cagtctgcat gtgagagaga actgcaggag aagcttgccc
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36551 gaggatttaa gccactgagg ggttgagct gggcagtgag taggacgtca
36601 ggcttgcaag ctctgggatt aggccagcca gagcccatat cccagtcgcc
36651 cctcttactg cctgcttgat ctcaagcaag accgctttgt tcatgggcga
36701 aaggagcgcc ccgggccaat aggtattaat ggagagcaca gggccaagtc
36751 catctaatt ctcaagtaat tttagctatt gttattaa gaacaccgaa
36801 cagactgaac atccgcttta gccctttccc ccaattttcg ttctttccgg
36851 tgttgacaaa tccctagttt ttttaagttt ataaacatg ttgtacataa
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36951 cttgttcttt ataataagta aacatgtcta cggatcctgt aaattatctg
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37051 gtcgaggcgg gtgggaccac tggggttcagg agtctagagc caggctggcc
37101 aacatggcga aacctgact acacaaaaaa cacaaaattt agccgggctg
37151 tgggctctcc tgtgtcccca gctactcagg aggctgaggt gggaggagct
37201 cttgagcctg ggaaggtcag gctgcagtag gctgtgatg cgccacttaa
37251 actccagcct ggacgacagt gagaccctgt ctcaagaaga aaaaaagaaa
37301 gaaagaaaga aaaaaagaaa aaaaaagaaa tatttggtca attatatgt
37351 cagctccctc caccactcgc gaatttacag aagaggagaa ctgggctggg
37401 cgagaccagg actagcccaa gattacacaa gttactcgtg ttagagacca
37451 ggattagaca ggagaggctc tagattctcg tctagactcc cctcctatta
37501 tttagcatta tggcttccgt aggtattacca tgagccctcc tccaccgtca
37551 agcggcagct accagccacc agaccagatc ccttcgaagg tgcccaggat
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FIG. 1 CONT'D

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37601 accagactga caaaagcgcc cgtacagtgc tcagtcctgt aaccaaagct
37651 gtctaggggt gagacatcgc tcaccggacc gggtagggct cgtgcgctaa
37701 gggcgccggg tattccagtt agtggagagg gaagcgccct ggaactgcatt
37751 gggcccgagg gagggcgccg gagcgaggaca gggcggggcc gggcggggcc
37801 gcggcgctgg gcggagactg cgcgcagcta gctcgggagc gcctcggagc
37851 ccaaccgcga gagccgcttc tcgcgcgccg cagcgcagcg cagcgcctcg
37901 ccgtctgacc tcgcgcgccg gcagcgtcgc ggctgggaaa ggaggcgctc
37951 accgagaggg accacgcgcc aggtctccag ccgcaccggg gacgcggcgg
38001 ccgcgcggag caccatggg cagccctggg cagccctggg aacggcagcg acggcccgga
38051 gggggcgccg gagccgcctg ggcgcgcctg gccgccttgc gacgagcgcc
38101 gctgctcgcc ctttccctcg gggcgctggg tgccggtgac cgtgtgtgc
38151 ctgtgcctgt tcgtcgtcgg ggtgagcggc aacgtggtga ccgtgatgct
38201 gatcgggcgc taccgggaca tcgggaccac caccacttg tacctgggca
38251 gcatggccgt gtccgaccta ctcatcctcg tcgggctgcc gttccagctg
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38351 cctgtccctc tacgtggggc agggctgcac ctacgcgcag cgtctgcaca
38401 tgaccgcgct cagcgtcgag gcctacctgg ccattctgcc ccgctccgcg
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38601 cggatcgctt cctcgctctt cgctcgtcgc ccgctctctt ggcctcgcg
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39001 tgcgcgccca gctctggggc cgcttccag ctcccttccc tatttcgatt
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39101 tccccaggga gctctggggg accccagggc gctttagagg tgggatcccc
39151 ggatccgatt cagtaaccag cagtgtttt ccagagcctc tgagaccaga
39201 aaggagagtt ggtaattctt aatccaacca cctgttagat gccacagatg
39251 agggatcctc acagtgcctt tgagaagacg agggagattt catlaagcta
39301 aaatttttta tttaagtta agtgatgctg aaggtcaaa gtaaccttgc
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39401 cagagaacag aaaacttgtc tcogaagtgg gtttgtgaaa ggaagcctgc
39451 caagcgccgt ttgtcagaga aattgctcct tcgtggttat gtcacgcctt
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39551 agcctgcagc ctggtcattt ttctcggggt gaggaatcgc ctaggtagaa
39601 gttttctcta atttatittg ctgttatctg ttattgcaga tggttccttg
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39801 atgatgtact tctctcagta ctttaacatc gtgcgtctgc aacttttcta
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40301 tgaataccca catctcaaa gttgctcttg tgtgatggtt tcatgaagtc
40351 ctcatctccc tactcttcgg aaagatgat gttcatttta cagttaaatg
40401 atacacaaag atgctgcccc aaaactgcca cctctgagat catgagtgtg
40451 ttttatgttt tggatgtaaa tgtaacagta catctacaag gaaccaggat

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FIG. 1 CONT'D

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40501 aatgatagtt ttgatccaag aaatgattta atacctatgt atggctgc aa
40551 aaaccttttag aagtaaaagg aatctctgggt agactccaagt gtcagggggt
40601 cccacctctc tcgacgtcac agcaaatcat aaagtttagg caaaataata
40651 gctctttcca gaagtattaa gcaatttggt tgcaacccac ttctccttga
40701 cactgcccat gggacctctcc cagtgccactt gggcatggggg tggcaaacct
40751 tgggcatcaa catttgagag tagagagctc agcaggacat ggccttctcc
40801 agtgactaca aatgacgttt gtaaaagact atttaatatg ctttatctca
40851 cctcagcttg gtgggggtgag tactgttgtc aacattcctg ttttggaagt
40901 gagtcttgga ttgcccaaac aggagctgggt gagctggagt ctgaatccag
40951 tgtttaagtt gctcacccaa tcccaagcca agatgctgtc cttactgaaa
41001 aacgccagcc aatggattta gtcaagagtg aaagagaact cactggacat
41051 tctgatcaac aactctgtaa cttgtttttg ttttttagag tttaaaaaac
41101 aaatattttt agagggttac tgctgtcact cagctccaaa ggccttcaat
41151 tatgccacct tctgtatgaa tggcaccccc aaagatgtggg cagggttcag
41201 ctttcacagt tgtacatggg accttttttg ggcctttcag attgataaat
41251 tcaaacctaa attacaatag gatcttgatt tgtatgagg aattgtcctg
41301 agacctttcat gaactctcac atctacaaat accagaaaaa tgacaaatgc
41351 tataacctca gagttataaa gacagataga cataaagtca cttgagact
41401 tggaggctag agaggcagct ccgttgatcc actgacttga gctctctgct
41451 tcacagccca cagtttgggt ggcctttgga aatgtctaaa ttacttccg
41501 ccacaggcca ccatagtctc ttttgaatag ttaaaaactac aaaagatgaa
41551 tacataaata acaaagggtct gccgcacatg cttcaaaagt ctcgttgtct
41601 tctcattttc tttagccaaag cctgactctca gtccccagcc cgtgccaaaa
41651 ttggcacagg aatgaagtct cctggttctc tttctccta gctagtggaa
41701 gaagcagatt gcagtcacct caggaagcat tcctcctaaat gtgttctgca
41751 gatttccagg gatatttggg aaaaatggtt ctggggttaa atatggcagg
41801 aaaataccac attgtgttcc cctaccaca cctcaaaatc ttccacaca
41851 taacacaata tagcatgtca gaggctctga gaagtgtct caaccaatc
41901 ttcttgact tatttatca cagaaccaac tctccatctt cctcccaag
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42001 gtagggggtc tgacagtgga ggtgtcagcc tggagctcc ataatctct
42051 gcttggtagc actgagtaca gcagctgcca cagtcctct gctcatggga
42101 gctcctctct ggagcagtca ggagtggcca cctccctagg gaaagtca
42151 gcaaaagaacc ttattaagat gtatataata tttatttta ttttttaga
42201 gacaggtact caccctgttg cccaggctgg agtgcaagtgg caaatcata
42251 gctcactgta accttaaat cctggattca aacctctc ccaactcagc
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43101 cgtgctggca tccagccac ttctcttga gccctctc ccttctgag
43151 gcagaaccac ttttgttagg tgagctgcca accttggaa agagtttgta
43201 tttcattcat tcccatggca aatatttacc aagcaactgc taagtgccag
43251 acgtgtataa tacaatacac tagaaaaact agtccatgtg atgatgtaaa
43301 aatcaatcaa ctttctaagt gcattctctg ttgaaatgt gtattgtgtc
43351 atctagacta acatggattc accattttag tcagatggaa gtgcagaca

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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43401 tcagggtttgc actatctgtc tggatgttcc tctcttttg tatgtgagac
 43451 atttccactt ctgaaggaaa tgttcaaaga gctattgcac aacatccact
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 44451 attccaggtt attgctggtt tatgtcccag gtgaaacaca ggggagtggc
 44501 ataagatttc atcacacttc tcagggcacg ctgactgaa aacctcaacc
 44551 ctgtttaatt ctgacaattt ccatttaata gttttgagcc atggttgacc
 44601 acaggttaact gaaacctcag aaagcgaaac tatggataag ggggactact
 44651 ttgtggttcc aaagaagcca tccagctgga aaagtctctg tgttgcattt
 44701 tccacaggtc cctgcaaata ggtcctgatg gtcaaatact cttttttttt
 44751 tttttttttt ttttgatata gggctcactc ctgtcaccca tgcgtgagtg
 44801 cagtggcaca atcacggctc actcgagcct cagcctcccg gactcagatg
 44851 atcctctcac ctcagcctcc tgagttagctt ggaactcagg tgcacaccac
 44901 cacaccaga taatttttta atttttttgt agagacaagg ttccaccatg
 44951 ttgctcagac tatctctaaa ctctaaagct caagcaatct gccctccttg
 45001 gccctccaaa atgttgggat tataggcgtg agccaccatg cctcagcact
 45051 taaatacttt taagaaatgt tgcaatacta tataaactct ttttggccat
 45101 acagcttttt ttttctctc atataattaac attccccaaa atactccacc
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 45701 catatatttt atgataaagt ttaaatatta tttagcatgac acactaaggg
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 46001 ctttaaaaaa atagcatacc tattacttac attttaaaat catttattat
 46051 ttatctgaaa tccacattta aatgggcact ctatttttat ttttaaatct
 46101 ggttaacccta ggaatactgc aatggaaaga ccaagagtc tggcaaaagg
 46151 aaggaaatcta gaaagtcctt ttcaagagag tgcctggggca ggagccggaa
 46201 gatggtaagt tgaaggaaaa tggccactga gcaacagtgg gttagatggt
 46251 cccagccttg gggccctctt tgtcgaggga gctcagcagc tgattaaaga

FIG. 1 CONT'D

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46301 accttgccgc tagtctctgta ctgtactgac ttgtaccccc acccaagagc
46351 cagcctctccc tgctgtggct tgatatccag caccceagtt aggaagaagc
46401 ctaccgccct tggtttaagg atctgcactg cacagtcagt aattattttg
46451 atttttttaa atcacaaaaa tgaagaatgt gtctgattca gaactctcgt
46501 gaatataatg tgtcatgaca atctgtcaaa ctgaagaagc ttcgtttgta
46551 tctaaccctgt tctcagggtgt ttatgtacac taggcattt tttaaggct
46601 taattttctc ttctgcgaaa aggggttgaa tgaataaaaa ttttgttaaa
46651 tgaataaata atttacaatg aggggtggtt cttttctctt tttttgagac
46701 aggggtctcac tctgtctccc aggcctggaga gcagtggcgt gatcagagct
46751 cacttgagcc ctcacotccc caggctcatg caatctccc acctcagcct
46801 cccaagtagc ttggactata ggcacacacc accacaccca gctaattttt
46851 gaattttttg tagagactga gtctcaccat gttgcccaag ctggtcttga
46901 actcctgggc tcaagttaac cgctgcctc agcctccaaa agtgcctggga
46951 ttctaggcat gagccaactg tccaagctgg gtggttcttc ttctaaaaaa
47001 aatgtaactc tgtgtgatga ctgagaccat aaaggataat gaagtaatat
47051 ttaaatctgt gtaaaagcaac tagcattgtg ccgggtagta atagatttga
47101 taaatactac ttaaatgtaa atggaggata gcaacatttt ggacagggaa
47151 aaatatcgat ttcttaaaaa ctaagttcat tgcagtatta taatacatta
47201 taatggagct tttagtataa taactattgc aaatgcacta taacatataa
47251 taatcacagg taacttggat gccatctgga atgcagtaat tctcagtaaa
47301 tgtgagctag catttttgtc ctcagttcat atcctattaa ctatcacttg
47351 ttgggtcttt ttgtttgttt tttaaaaact gaacacaaag tactgaacat
47401 ttattttcta aaaatccaac aactcataag aggcataattc acttcattac
47451 tttagcttttt aagggacacc attggcattt tactcccaaa ggaatgctatc
47501 ttctactgaa agtcttcagt tattttttgt atttataata accccaattc
47551 tatgattctg agttatcttc cagcatgcac ctttaaaaaa tggattcttg
47601 tgcctaattgc aagcatctgg ctttcttaaa taaagatgaa aatggccagg
47651 tgcfaatggat tgagccttat agtccgagct acgcaaggag ctgaggtggg
47701 gactactctc ttaagccagc ggggtgaaac ctgcagtgag ctatgatcga
47751 gccaccgcac tccagcctag gcaacagagc aagacotcac ctctaaaaat
47801 aataaaaaat aaaaatgcac ttcataaaca catttccag tagcagttcc
47851 taagttggat tctttaaatg ttcccttact aatttccata tacattttga
47901 ttcccttcga caaggaaaaa atacaaaagta tattttatgt ttaagttgtt
47951 gggctatata taaaaatgaa taggcctgta atccccagac ttggggaggc
48001 agaggtgggt ggatcacttg aggtcaggag ttgagaaca cgcctgccaa
48051 catggtaaaa ccctgtctct actaaaaata caaaaaaaaa aaaaaaacca
48101 actagctgga cgtggtggca catccctgta atctcagcta ctccgggaggc
48151 tgaggcatga gaatcacttg aacacaggag gttagggttg cagtgaagcc
48201 ggattgtgcc attgcactcc agcctgggca acagagtgag actgtctcaa
48251 aataataata ataataatag gaccaggacc cttaacotca agattctgtg
48301 acttctcagg atgggggaaa aaaagtatgt aataagtat agatgtgatt
48351 aataaagttt taataaagag caggggaaat tagagaaact ctaccaagca
48401 ttaaatgtat taactttagt aaccagaat tccctccatg gatgtagtta
48451 agattttata gtatttgga ggcgaaggca ggaggaccat ttgaagccag
48501 gagtccaaga ccagcctggg caacatagca agacotgtc tctacaaaa
48551 aaactaaaaa gttagccagg tgtgggagtg cacacotgta gtcccagct
48601 gctagagagg ctgaggcagg agaatacctt gagccaggga gttcaaggct
48651 gcagtgaagt atgcttgcac cactgcactc tagcctgggt gacagagtga
48701 gaccctgtct caaaaaataa caggggaaat tagagaaact ctaccaagca
48751 tgttggctca aaccatgcaa actctgctga acatagttta ttaacaataa
48801 ctctccatct gaggagtcac taaattcttc tgagctcagt ttgctcacat
48851 gtaaaagtaag aaggttagaa ccaaatattt tgtcatctct tctacataaa
48901 ttattctgtg aatccctcac ttccctcagc ctgttagttt tgggtatatt
48951 ttagaataat gctaagaata ggccaggtag agtagctctc acctgtaate
49001 ccaacacttt ggggaagccaa aacaggagga tcygttaag ccaggagttc
49051 aagaccagcc taggcaacat gacgaaatct catctctaca aaaaactcaa
49101 aaacatccag gtgtggcggt gcatgtctgt agtccagct actcgggag
49151 ctgaggtggg aggatcactt gagccaggga ggtcaaggct gcagtgagct

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FIG. 1 CONT'D

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49201 gtgattgtac cactgcactc cagcctgggt aagagagcaa gacctgcct
49251 caaaaaaaaa aaaaaaaaaa aagtactaga ataaacaaa agagacttgt
49301 tgcacctaaa atagcttttt ataaagcttt caagtccatg aggttgattt
49351 tcatttaaaa tacagtgtct aacaagtgtg gtcactgtct gtgccacca
49401 atagcatgtt aaagcatttc aataggatgg cacaagagag gaagggtcat
49451 tagcaacaga acagtgtgtt tgggagatgg ggtaactaga ctgcaggaa
49501 agaatgagga aaagtgggac atccaatggt gaggtccatc acactgatcc
49551 tgagcccccg acggcaacac caaactatgc tcagactttt ttaaagaaat
49601 tatttaaaat gacaaaataa aattgtatat gtttattgta tgcaacatga
49651 tgttttgata gatatatgtt gtatacattg tggaaatggc aaatcaagct
49701 aattagcata tctgatacct cacatacttt ttgtgtaaga atatttaaaa
49751 tctactgtct tcgcaatttt tagatataca atttattttt gtaaaccata
49801 gtcccatgta tgtacaatag atttgccttc tttctctttc ttgtttgaca
49851 cagggtcttg ttctgtcgcc caggatggag tgcaagtggc tgatcatggc
49901 tcaatgcagc ctgcgacttc ggggtcccaag tgatcctgct gcctcagcct
49951 cctgagtaac tgtgactaca ggtgtgcgcc accatacctg actaattttt
50001 aaattttttt tgtagagata gcgtatcact ttgttgccca ttctggcccc
50051 aagcaatcct cctgtctcga cctcaaaaa ttgctgggatt agagcatgt
50101 ggcaccacac tcagccatga ttgcttgaat ttattccctc tgactaactg
50151 aaattttgaa tcttttgacc aaactctccc caatctctcc ctgcttcogt
50201 ttcttggtaa ctgttttact ctctgctttt taagattcca atttttttag
50251 attccacata tgaagtgaat tatgtggatg ttgcttttct gtgcttggtc
50301 tatttcccat aacataatgt ccttcaagtt catctgtggt gttgcaaatg
50351 gcaggatttc cttctgtttt aaggctgaat agtatccaa tgtatgcata
50401 tatgtatgta tgtatgtata aaaccaattt tccataacac tcatccattg
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50501 aagaatcagt ctttctgccc acaatgtgtg gtgtcttcog tacacacatg
50551 gtggggggctg atcagggaat agtgggtgtg tcaggtatat ttgtgtccac
50601 caggtttcct tccaaaaatg atgtccaggc tactgggctt tttagaagaat
50651 agtcccaagg tatctaocga ctctgctgtt ctgggaagt caggattttg
50701 cgtaaagaca tctgtcgcat tgggaagcat tgaagaaaaa tgttcttttt
50751 cttaacggctc attgcaactg cttttaggat tccacagtgt taaatctgcc
50801 ctttcttttag agcagtcgaag aaagatgtaa taactgaagg aaatgggcct
50851 tcttccactg ataggcatga tgcttttgaa atttaagtgg agctcttgca
50901 tttgtttttt gtagggacgg tataaggaaat ggccaaacgc ctatagtgaa
50951 tagctttata gctgttgagc atttgtgctc ttttgtgcat caatagattt
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51051 ttattttattt tttagagatg gagtctcgct ctgtcaccag gctagagtgc
51101 attggcacga tctcggtcca ctgcaacctc tgctctctgg gttcaagcaa
51151 ttctctgctc tcagcctcct gagtgcctgg gactacaggc acctgccacc
51201 aagcctggctc aatttttgta tttttagtag agattgggtt tcaccatggt
51251 ggctaggatg gctcctaact cttgacctca tgatccacc gcctcaaaaa
51301 atgccctatc ttaacaagag cctttggggg gaaaattcca gtggcaact
51351 tctggcatct tcttgacagg cagcagctta actacagtta tcacattcac
51401 aaatgaagtg gtaaaaaata ttgaatttta ttatactttt tggttgagg
51451 aagccactaa tgtggccact aaacatgatg ttcaaatgaa accttctggg
51501 aagtttttca gggattacca ggataaccta gaatctcaac tagcctttga
51551 cattattaga aacagtgtcc caatggtaga gcaactattt cagaacttta
51601 gatgtttctca gatcagcac ctcaaagtact tatactaaga cacaggacat
51651 ctccagctca acatgtcaga gtaacacact gctgacatgt acagagtga
51701 tcaccaatct agacgcactt ctatggagctc ccattgctgg aagatcaagt
51751 ggaataacac acggaaagcg aaagaacctc tatctgttca caatttatga
51801 tgctcgctat ctgcctgaca tctatgtctc ttctttaatg ttacatcac
51851 atttcaggctc ctgtgttccc aggatggaga ctgagagtgta gcacagatgg
51901 atgtaagcat cacaaaaatg gcccaaaaaa acactgacca gaggtcaggt
51951 catgtcactt ggttaacata actcttaata caaaacatgg ttgtcattta
52001 atgatagaca cataaagcaa actctataca aatgagtcag agcctccaaa
52051 agtaactcgg aaattactga caataactga gataatattt taagatgctt

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FIG. 1 CONT'D

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52101 tgtttttcac tattaggaag taaaactatg atttgcatat ggcacttag
52151 tcactaaagg taaatttggc tacaggcctc ccaccaaact cattagccat
52201 ctatgtccta catgttgat aatcacagcc tgaacttgca tgccttgaaa
52251 acttctctgt ctccaagaag atggtattca aagtgtcaag ttctatttct
52301 gtgcgatgcc cgccaagtgc gtgatgaagg gattaagtc attttgggaa
52351 ttacatttat aatctaccaa tctaagtacc aggattttag ttatcagctt
52401 ttggaagaaa taaattgtga ggaagtgagg gagggagaaa aaaatttata
52451 caaagaacg aagcttccaa ctcaaatata ttgtgtttta agtgcaactat
52501 taaaactatt ccataaggaa tagtttagga agtlaccaga aagtgataga
52551 aactgtgtgc tcacctgaac aggtattcag ggtaaacttt gtcttcatca
52601 aagaatggac agtagccagg tccagtggct caggctgtaa tccagcaact
52651 tgagagtggt agttgggaa atcccttgag gcccgaggtt acagaccagc
52701 ctggtcaata tagtgggacc ccactcttta aaaaaaaaaa aaagaaagag
52751 aaaggaagga ggggagggga gtggagggga ggggagggga gggcgaaggg
52801 aagggggaaq tgtggaggga tggaggggga aggggagggg agggaggaag
52851 gaagaaagga aggagttaca gttacagttt gaatggaggg atgcctcact
52901 gttgccccac atgtgttgtt ggggcttgca cccctttgtt gtatctctac
52951 cctaactggg ccactcagct ttttagcgag cacacatgaa ccccttgttt
53001 tacaagcaag acagaacatt agttcacaga cactgacaa tgaatttgtt
53051 ctcttttggt attctttggt ttttttcat tgccctcatc tgaatttata
53101 gcataagcat cttgatttat ttttgcaaaa aaaaacttcc aaaaaataaa
53151 gttttgtagt ttacctagga ataatacaca aaatatgca tttttgtgag
53201 gaagaagctat ttgtatagtt tatttcaact taataatat ttgaaatttgt
53251 ttgaaaagca aaataaaaaa aagcatcgca gagttaactgt gtgattgcct
53301 gatgggttgt cctgcttctc acacagacaa aaccaattca ctgggaacac
53351 ggtactatag taaagataaa gtttaattaa ctaaggccag ccaagtggaa
53401 gaactggagt tattactaaa atcagttttg ctgagaactc agaagccaga
53451 gtttttatgg ataatttgtt gggcaggggg ctagggaatg gatgctgctg
53501 cttggttggg gatgaaatca taggggtgtg gaaaacagtc ttcatgcatt
53551 gagtcggcct ctgggtgtgc gccacaggac cagctgagtt atgcatcatg
53601 ggtccgggta ggatcagttg gttaccagaa tgcaaaagtc tgaaaaatc
53651 atcaaaagat caatcttaga ttctacaata gtgatgttat ctataggagc
53701 aatgactcct gggcagtaga agagatgtaa aactatgcc atatttagca
53751 gaattcaggc cgtccataaa tctaaccctc gtggcctttc attagactta
53801 caaaggcagt tttagttcct ggacaaggag agggctcatt tagggagaga
53851 ctactgcttt caagttaaac tataaactaa attctccca tggttagctt
53901 ggcctatgac caggaaatgag tgaggacagc cagcctgtga acctagaagg
53951 aagacggggt cagccatgct agattttctt gactgtcata atctttgcaa
54001 aggcagtttc aactgtccag attattttag tcaactcaggt gaaatgtata
54051 tgatgcacat gtaaaactaa accattcagc tttgtcata tgagtgaact
54101 tgtaaatgtg aataaattac attttagctt ttgataagac atatgtgcatt
54151 tattgcataa gtatgcaaat acttaacctc ttctcttctc caaggcaact
54201 tgaactaaaq agtccctaaa tctgaacatt ctttttatta aaaaattttt
54251 gtgctccaaa aagcatataa agcaatttat aaagcatct aaaaataaac
54301 acacatgaag taaaagggga aagtataaac taacaaaaaa ttaggatagg
54351 caaaaataga ttataccagg aggaaaatga ggacataaaa ttcatatcct
54401 ggtgtatggt taagaagtgt acgtgatcca tggggagacg gagaatcgat
54451 ccttcaagta ttccaagatg acatcttaaa agctagaaaa ctatgtcctc
54501 aacaacaatc tttaaggcaa gcatagtaat gaatgtccta gagctttttc
54551 ttataaagcc aatgagaaaa attgtcccac atttggaaaa tgattaaatat
54601 gtgactactt aaattttttt gctatgcatt tttttttttt tttagatag
54651 agtcttgctc tgtcacccag gctagagtgc agtgacacaa tctcgtgcc
54701 ctgcaacctc cacttcttag gttcaagcaa ttctcgtccc tcagctccc
54751 aagtagctgt gattacaagt gtatgatacc accacacggg ctaattttag
54801 tatttagtag agtaggggtt ttgcatgttt agccaggctg gtctcaaac
54851 cctgacttgc tgatccacct gccttggtct cccaaagtgt tgggattaca
54901 ggctgagacc attgtgcccc gtcacatttt ctagtattag aaaaataact
54951 gactgttga ataaaagcag gacattgtta aagggaactc tcaattgata
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FIG. 1 CONTD

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55001 ttctgggggga atgcaagttt gttgtcacat tttttaaatt aatagcacac
55051 aattcataga agcatagccc tctaaaaaga gattaccttg ctgaaactga
55101 aaaaagtgtta ggattttata gcctttttaa ataagtaaat taaccccata
55151 caagatacca ctatatacct attacaatgg ccaaaattcca gaacactgac
55201 aataacaaat gcaggtgagg aagtggagca accaagagctc tcatttgtca
55251 atgaaaagag tcaaatctta aaaaaattct tgaagagatt tactttgagc
55301 taatatatgag agaccaaatga cccgtgacac agccctcagg agatcctgag
55351 aacatgtgtc caaggtgtgc agggatacaag ttggttttat acaatttagg
55401 gagatataag acatcaattta atacatgtaa gatgtatact ggttaggtct
55451 ggaaaggcag gaaaaccgga agtggggact tccaggtcat agttggattc
55501 acaggttttc tgactggcaa ttgtttgaaa gagttattat ctaaagacct
55551 ggaatcaata gaaaggaatg tctgggttaa gataggcagt tgtagagacc
55601 aaagttttat catgcaggcg aagcctccag gtacgagcct tcagagagaa
55651 tagattgtaa aggtttctta tcagacttaa agaacttatt ctatcaagtaa
55701 ttccaaaatg gaggagggca taatgaggca ggtccagctc ctcttccca
55751 tcatggcctg aaagttgacc tgaactagtt ttccaggtta actttggaat
55801 gcccttggtc gagaggaggg gtccaatcag atggttgagg ggcttagaat
55851 ttattttttg gtttataact tcatttctgt tagaaggaaa aaaaagttac
55901 agttactttg gaagatagtt tggcagtttc ttacaaaaat aacatactc
55951 ttaccatag atcaacaaaa catacctctt ggtattttacc caaaggagtt
56001 gaaaaatagt cccacagaaa accctgcacat ggggttttgc agaagcttct
56051 tttttttttt tttttaattt tatcatgtgc caaacttggg agcaaccaag
56101 atgttgttcg gtaagcgaat agataaaata ctatgtcaca accaagaat
56151 ggaatatat ttggcactaa aataaaatga gctatcaagc ccgaaaagat
56201 atggaggaaa cttaaatatt gcatattgct aagagagaag ccagctctgaa
56251 aagactactg tctcgcaatt ggcaggtctt tggaaatcta cccctaaagt
56301 ctgcggaagc taagaggcca agaaaggagg tgcacacatt ggtttctcag
56351 gaaaaaaaca acaaaacaaac aaacaaaaac atttaatagg gacttaggaa
56401 gagaagccac aatgtcctgg gcagctgccca gacaagggtt tggattccca
56451 cactatgacc cccacagacc cagggtctcc atgtcatagg gaaggaaagt
56501 gtaggacaat tatagggaaa ggcaagatgc tatgtgaatc tgcctagagc
56551 agaatttatg gtcaggggag tttgacctta agggcaggat ttacagtaag
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56651 ccctaaattg aggttaatca agaagtcacac agggcggatt ggcatccaa
56701 atggagttgc gttagctccc acaactacat acaatgattc caactatagt
56751 acattctaga aaaggcaaaa ctatggagac agtaaaaaag aagactagtg
56801 ttgccaggag ttaggggtgca gggatgaata aagcaaaagc cggaggattt
56851 ttaaggcagt gaaactactc ttgatgatat actacaatgg tggacacatg
56901 tccctacaca tttgcccaaa cccagagaat gtacaacacc aagagtgaat
56951 tccaaatgaa actgtggact ttgggtgatg atgacatgtc agttagggtt
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57101 acccaatttt gctgtgaacc taaaactgct ctaaaaaaat aaaaactttt
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57201 accaggcata ttgtacctaa cttagctatt tttagagaact cttttctctt
57251 caagtattta aatcctgttc ctcaaataca ctctgaacta ggtctcatgt
57301 ctgccaccaa cggttcacctc attttaggag ttaaatgagg gggagttaat
57351 tgagttttat tggaaaaacg ccacactcag tctgtttcat atcatctagt
57401 gctgcttttg tagcagaatg gaatatgtgt gacacagact aaatggtctg
57451 aaaaacctaa aatatttgct atctgggctt ttccaaaaaa gttttgaac
57501 tccgggccaa ataaaactt gcacacttgc cgaattctgt atgaaaattt
57551 tgcttgtagc atcagttaac atcagcagat gatatgatac caaaaagtac
57601 ttggtatcat cagttaacat cagcagatga tacgatacca aaaaagtactt
57651 ggatcagttt gcttttggta aaagcaattc tacagagggc caaaatactt
57701 tagctaaaaa ccactgattc agaactctta aggctgggac ccagaaatct
57751 ggggttttaac atagctctct agggactctt atgcatactc cagttggaga
57801 atcgtggag cccactggcc tagcccaagt gtggatgtac agatctgcac
57851 tcagaaagtc tgaagtgcag cccaagattc tgcctttctc acaagctccc
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FIG. 1 CONT'D

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57901 acatgatggc gatgttgctg gtctgagggc cttagtttcc tcacctgect
57951 aatggagatg ataaaaatct atttcatagg gtgtgtgtgg gtagtaaatg
58001 aagtcataat gtccatttat atcctgcccc caccctttc aagctaagtc
58051 tatgtgggca agttaccgaa ttgtcttggt cctataaagt gagctaataa
58101 atattgcccc catcacaaag ttgctggagg gagcaaatga gataataaac
58151 ataaagtacc tagaacaagag cctggaacac tgtaaaagct caataatgta
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58251 agcagatatt ccatcagttg tagtttctct cctactccct ctccctacca
58301 tctctcctc cctaccacct cctctagtgt ctctgttga ttctttttt
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58401 tgggtcaatc atagctcact gcagcctcaa actcttgggc tcaagcgatc
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58501 aactggctaa ttttaaaaag tgttttttag agatggagtc tcgctatggt
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58701 ttcagaataa cctgaaccca tgagcttga cctgacagtc cagaggtgcc
58751 acacaaacag ggaccccaaa tgaacttga cattgactgt gctggccagg
58801 cccctctgcc caccacctct caggcagggt ttggtagag agtttggga
58851 aaacaggaa agtgggctgt ccaagtcttc ccaactcag ggagcaccat
58901 ttccagggct gcctgaacat tcttactctg cagcacatta atctacgtgg
58951 caccagtttt atttttctga gaagattatt tgggacaata tatggaaat
59001 ctgagagatc atttctcttt ggcaagcactg cccctcataa caaagcacat
59051 atttctgaag ggcattctga ttttgtttca ggtttcttt ttgttctca
59101 gggtttaagt gctgccagga atggccttct aagaattgct tagcaaacct
59151 taacttccag actcagggtg gtggggataa tcaattttt tggccgaat
59201 gaccaaattg aaaccatccc cacagggttg caaagaattg catgctgggt
59251 tctggacaga aatatagtta taattaagaa tgaatcagcc gggcgcggtg
59301 gctcacgctt gtaatcctag cactttggga ggccaaagcc ggacagatgc
59351 ctgagctcag gagtctgaga ccagcctagg caacacggtg aaaccccatc
59401 tctgtcaaaa tacaaaaaga attagctggg catggcagca tgtgcctgta
59451 gtcccagcta ctcgggagcg tgaggcagga gaaatgctg aacctgggag
59501 gcagaggttg cagtgaagcg agatcgtgcc actgcactcc agcctggggc
59551 gacagagcaa gactccgtat ctacaaaaaa aaaaagaact aatcagacg
59601 gcacggtagc tcacacgtct aatcccagca ctttgggagg ccaaggtggg
59651 tggatcgctt gagttcagga gttcgagacc agcctggcca acacggtaaa
59701 acctgtcttc tactaaaaat acaaaaatta gccaggctgt gtggcatgtg
59751 tctgtaatcc ttgtattcca ggaggcagag gcatgagaat cacttgaacc
59801 taggagggcag aggttgcat ttgagcagtat tgtgccacta cactccagcc
59851 tacctgggca acagaatgag actctgtctt aaaaaaaaaa aaaaaaaga
59901 ctaatcagcg cacaaatcag cacacttctt tgttgccaaa agtcactaga
59951 tctgacctat ttgcatcccc attgttctta aagatagatt ttctgacatt
60001 aagattataa tgatggagac aggaggcaga gaaattctag gcagacaggg
60051 gcaggtccct ggcaaaagtc catctcaag ccaaaagacc tgagactgca
60101 gcccaaaagt agaactaca tccctgttct cccgtcaaa tgttgcttt
60151 tccaaaacca cccatggccc gcctggcccc ctatcctgtg cttataaaaa
60201 ccccagactc agccggcaaa aagggaagcg agctggacat cagagactat
60251 ggctcaacgt ctgagagaa gtgctgact tcagagagac agcttgacag
60301 caaacttca gagaagaatc tggccagaga cagccggact tcaggggaag
60351 attaccttcc caccacctcc ccttttcagc tcccttctct gctgagggcc
60401 acttttatca gcgataaaat cctgttttta ccatcttcca attcttctg
60451 ccaactcat ttctcctgga tgcacaaaca gagcctagga gccacaagtg
60501 cagatgcгаа aggctgtcac actggccctt tgcctcact ggttgaagac
60551 agctccctca catgaaaaag cagaggggag ctctgcagag ctgtacaac
60601 ttaagctgtc tgcacaaagg agagctaaaa gacctgtata acactccctc
60651 tggggcttca ggggttgtag gaacccacac agatactgcc ttgggggcat
60701 gcatgagaytt tgctcctgct ggtgctcaaa agtgcctacc tggtcctgc
60751 acctgctcac ctgtgtgctc cctcccaaaa ggggtggaga gcagtgaagt

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FIG. 1 CONT'D

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60801 cgaatgagtg gagttcactc ctgctggtga cgaagtggcc agctgattcc
 60851 agtgggtgtg tactccagtt cctgccttat ttgctcatgc gctccctccc
 60901 gcaaggagtt gagagctgtg ggctgagtaa atggggcacc cctattgcga
 60951 gtccctgcaa gcggtcaggg aaatatccta ctccaataag actgtttaaa
 61001 aatggatttg tactcctgtt gtctctatag agatgatctc tgacggaatc
 61051 ataaggcttt tgtttaaagg ttgcttaaga tgttctcaga tccaaatttc
 61101 agcgaccagt ttggagaccc tcacagaaga acgggatgag cataagaaca
 61151 cagcttcttc atctccctgt cccatgactt caccctgtgc tcttcgacca
 61201 gtgaacactc tccacacttg ggccactcc aaaaacctaa agactgtagc
 61251 cccaaactcc tcagacagat ggatttaaga ttccctccca tctcctctg
 61301 tggtagccct ataggtaaat gctttatctg ctaaaaccca gtgtctctgg
 61351 cactgggtcat ggaagtgcct ctcaacagag caaaattgag tgtaaggtac
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 61451 tccagctaca gattcaagtga ctatgatcaa ctccaacag catcagcttg
 61501 ctttgttgag aggatctgtt cctaataaac acaactgtaa gactaacatt
 61551 cccaatccac aggaactaga ataaagaata attcaggcta cttagagaat
 61601 aggtaaatga aagatgaata agggagggac aatcaacagt attgagacc
 61651 tgtgctttgc caagcacact actactggg atcatgtagc ccttcagtga
 61701 aatttgtgat aaatgtttta ccatcatcct ttccctctct ctctccctgg
 61751 gctattcctt cctcccttcc ttcttccctg agtaagtcat tcaaaaaggc
 61801 atttgataac ctccctccc ctcccttca agggagaaga ggctattaca
 61851 gcagaggaag aggaaggggc tggaaaagcca aagaagcaac tagcatgcta
 61901 ggaaggtgag tcacatcacg gggaactgag ggtggaaaaa agaaagaaag
 61951 gacagaggct gctcctttag cctggatccc agagccaatt cacagagaca
 62001 gcagcatgta acatagatga aaattaaact ttgtgggggc aagccaactga
 62051 gatttcatgg tcaatttgtgt gaaaggaata tgaatcttgg ggcaccaaaa
 62101 tcactaaagt aaagggaaaa gtcaagctgg gaactgctta ggacaaacct
 62151 gactcccttc tattcaagtc atccctctgc tcactgagat aaatgtatat
 62201 ctgattgcct cctttagaag gggtaactag aagctcaaaa gaatgtctagc
 62251 atttgtttct tatctaccta agacctggaa gccctccc aacttcgaga
 62301 tgtccacact ttccagacca aaccaatggt catcttacct atgttgttgg
 62351 atgtttcata tctccctaaa atgtacaaaa ccaagctgtg ctctgaccac
 62401 ctggggcaca tgtcgtcaag acctcctgag gctgtcacg gcgcatatcc
 62451 ttaactttgg caaaataaac ttcttaaat aactgagacc cgtcttagat
 62501 ttggggggtt cacatttgtt acccacgca agccgggtct aagccaactg
 62551 atacagtaac tggtaaataa ctctgttct tagagtgtga atacagcttg
 62601 tctctctcat atcaagccc atggctcttc cacttgatat atagaattgt
 62651 ttattgattt aaaaaccatt ttattgatta aactggcctt tgtagaactc
 62701 agctgtcttg agcttgtcca ctctcagca cttagggaaa atttcatttt
 62751 ataactctt ttagtccctt tattcctctg cagcagaaca attattccac
 62801 caactacttg gaaaagttag cctagtctga aaaaatttcc agctacaaat
 62851 acctaaaaat gcaggataaa atatggctga gctagcaaga aagtaagaga
 62901 aatagtccaa gtatttaaac tgcctgaaa tactaaagga ctgaaaatgg
 62951 aatgagacca ggaagccaaa gagaggttaa tgagcaataa agctaalatg
 63001 tgttgaagg gcagggcaga cttagactgc tggggatkaa agatacacac
 63051 acaaacacac atataacata tataggtgtg tatgtatata tatatacata
 63101 tagttatttt gagagtttaa gacttaaga aagttgcaaa aataatacag
 63151 agttcctgtg ttacccttca cccagcttct gcaataataa tgtcttaact
 63201 attcacagca ctttggtaaa agcaggaaac tgatactggt aaaatactgt
 63251 taatacaggt atagattcta ttgtgtttt actagttttg aatgtaccac
 63301 ttgcaatttt tgggttatag ctctatgaat ttatacaat gtatagatat
 63351 gagtaactgt caacacaaag aaactctgtc gtgttaacct ttaacagtea
 63401 gacccttgct ccaaccataa catttggcaa tcatgattt gtcttcaat
 63451 gctataattt ttctttggct atgagaatgg tatctagatg gaatcataca
 63501 gtatacaaca ctttaagact ggcttttaaa aactcaccac aatgcccttg
 63551 agattcattc aagttgtacg tatcaatagc tcaattactt ttatggctga
 63601 gtatgtgcc atggcatgga tatactccag ttgtcttct atctattcac
 63651 taaggactgt ttgcttgttt tacagttttt ttgtttttt gtttttgaga

FIG. 1 CONT'D

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63701 tggaggtctca ctctgtgcgc caggctggag tgcagtggtg caatcttgcc
 63751 tcactgcacac ctctgcctcc cgggttcaag tgattctcct gctaagcctg
 63801 cctgagtagg tgggactaca ggtacatgcc accacgcctg gctaattttt
 63851 tgtattttta ctatagacgg ggtttgcaca tgttgccacg ctgatcttca
 63901 aactcctgac ctcatgatcc gccccgcttg gccctccaaa gtctgggagt
 63951 tacaggtgtc agccaccatg cctggcctgt ttccagtttt tgactatata
 64001 aaataaagcc accatgacat tcatgtacag acgtttgttt gaacataagt
 64051 tttggtttgt ctaggataaa taccacgagg tgtgattgct ggggtgatag
 64101 ataagcatat gtgcacactt ataagaaact gtcaaacgtg ttctagagt
 64151 ggttatgccca ttttatagtc ctaccagcaa tgtttgagag atccggttgc
 64201 tctgcatcct cactagcatt tagtgctgtc agtactgttt attttagcca
 64251 tttaaatagg tgtgtagtag aatctcattg tggttttaat atacatttcc
 64301 ctaatggcca atgacactga acactgtttt acatgtttat ttgccatctg
 64351 tatactcttc ttggtgaaat gactattcaa gtctttgctc caatttctaa
 64401 ctggactgtt tacttactct acactgtttt acatgtttat atattctgga
 64451 tatgagtctt ttgttggaat catgctttgc aaataatttc tctagtccca
 64501 tggcctgtct ttaaacctta gtgcagaatg gagttctctg gatatagtca
 64551 aagctcacac ttcaggaaat cctcagaaca ggcgaactag aaaaattctt
 64601 aatcacctga agagctttac cctcagactga agatagatct gaagaaatta
 64651 acaagccaaa gaataaaata gcaagctgaa agatagatct gaagaaatta
 64701 gccagatgtg ggctcagaga aacaaaatga tgcaatattt taaaataaat
 64751 aatttagaac ctcagaaggt ttaacctatg cctaatagga attccaggag
 64801 gagagcttag agtaaatgtg tccaatacac tagtagccaa tagccacatg
 64851 tcactactta aaatgtaaat taattaaaac taaatgaagt taataatgca
 64901 gtctcttggt tgtactggcc acatttcaga tgcctcaatg ccacatgtgg
 64951 ctggtggcta ccatattgga cagtgacagt atagaatact acaggaatac
 65001 ctactggaca gtgctgactc aggtcataaa acaagctcga acaaatttca
 65051 aagaactggt atgatacaga tgtttttgtg aaataaaacta gacattagaa
 65101 attaaaaaca aaataaactc tactgcctcc tctcaccttt ttcccattca
 65151 caatccacc tcttaatgtc tcatgttctc tgatgagaag cagaacgtcc
 65201 ctactgtgtt ccatggcacc aagtctccca gaacccgccca gtctctgatg
 65251 acagaacatc ctggaccgcc cagctccaca ccccaaccga agaagtcttc
 65301 taaaacactg accatgacag cctggggtag gtttccactt taacattctg
 65351 accaaaattc tcaactcgat gcagtcagag tctgcgcaac ctgggacctc
 65401 gagccaagaa atcctcaagt gaccttactt ggcaaaacca acaaaacac
 65451 caaatacagg tctcaagcga ttacagctc ggtgcttaac tcggtcacgc
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 65551 acgaggagcc ctgaagtgcc ggtcaagctt gagcgctcat ctggctgcgc
 65601 ctagtggccc gttgccttac agttgctgag aggaagcgag aggcgggggc
 65651 gctagggccc agatcatgtc tgactgggag aggtttctct ggcagcagag
 65701 gacgttaggt ttgggatgaa agaagctggg cagatgcmaa atctggagaq
 65751 ccgagggccc gggcggtcag tcagcaccca gactgcagc atgaccggtg
 65801 agtgcctggg accctgctcc gcaccaacta cctttcgctc tgccctgtgc
 65851 gtctcccgtc attgaactcc agattctgtg tctgagctcc ttgctctcc
 65901 ctgctgcttt tggatgtctc ctgccgcccc tctcgctgtc cctcccgagg
 65951 tcgccaggac caatcggctc ggtcgacatg gcttttgaag tctgctttt
 66001 taacctgttt agctacctct cacaggacct agagctgggg cctctgaggt
 66051 caaagagcct gaacatttcc aaacggcgct ttgctgttga ttcccaatt
 66101 aaccgcacgt gacgttttcc tgtatttcga ctgctttacc gtccgaagtc
 66151 agcgcatatt tcgggttgtg ttctaactgc ttctctttta gcaacgcccc
 66201 atcacagtc ccaagaaaagc ttgcaccacg acgacgtcag atgcgaagac
 66251 ttttccacgc ttgctttggg ttgtccccc cagctatgtg tattagctgt
 66301 accgtttttt cctgcagggt gagggctgga gaaagaagcg tcaactttt
 66351 aagtggagaa ggaggtagcc acgactaagg ctgaagcgctc tactgtctaa
 66401 atacctctga ctctctgttc cctatctttt ttctgtgctc ctgtgcgaag
 66451 cagctgggct taggctcgag cacttaagtg gcatgagat tggctccctt
 66501 tttcaccaat agtaacaaa tttaaagtg ttgctgtctc ttttgtaggt
 66551 cagataccaa ggtcttctaa agtcaacctt ttacactgtc tcagcctctg

FIG. 1 CONTD

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66601 gatggagctc ttccaccgag aagcccagcg gcaaaaaatct caggatataat
66651 ttgtttcata gtttttcccc ttagaaaagc agtgggttaa aatctgagtt
66701 tattgctcca gtttctgtca tacttaaaac caaacttaac aaggcttaag
66751 atttaaaaaa tatctttatt gatataacat acactttata attccagccc
66801 gtaataagtc atcttccatt ctaaaaaatac ttctcgagaa taccatgttt
66851 atcgggtact aatggtattc atatgctcagt tcggctaata agatatttgt
66901 ctataccaca taatttcccc caattatata tactgttggt gttttatcta
66951 ggtagtttac tctctcgcca cagaaaataa taattgcctt ggagatagag
67001 accatgtctt attttaccta gcatataccc tttagagctt agcattatat
67051 gagtgctaat tgattaatgt tggatggaag tagtctcttt ttggatcttg
67101 aaagacagga tcaaaacaga ttagaatatg gctgtgtgca gtggctcaag
67151 cctgtaatcc tagcactttg tgaggctgag gtgggtggat caccctgaggt
67201 caggagtcca aaaccagcct ggccaacata gtgaaacccc atctctatta
67251 aacatacaaa aattagccag gagtggtggt atccgcctgt agtcccagtt
67301 acgcgggagg ctgaggcatg agaatcgctt gaacgaatcg ttggaggtta
67351 cagtgaagct agattgcacc actgcactcc agcctgggtg acagagcaag
67401 actccatctc aaaaaaaaaa tcgaaaatgt atagtaagaa taatcataaa
67451 agccaatata ttggaattgg aagtataaac atcctgcctc ttttctttct
67501 cctacccttg gggcaacagg gggctaggtt ctcattgttc tccatgcttg
67551 gaatggcatg atgctaggtt ctcactattt ctgtttgata attttggaag
67601 cttaggggtg tgccattaat ttttataggg ggccacggcc attgaaaaat
67651 agtattaggt taagttgagc atttaagact tttttaaaaa cagaggtaaa
67701 atgagggggg tggggcagaa gcttctctac cactctaaac
67751 acattactgt taatattttg gtgcttccaa tcttaagcat gaggtttttt
67801 atttttactc ttacaaagtt gtagtataat tctgcatgta ctgcctgagg
67851 ttccaacttt gcccataaatt ctgctgaaag gtgcttttag attttccaga
67901 gaaagactat aaatccttaa attcccacag tactcttagg agaccaacta
67951 ctcttttcat ttactgtgg atgaggtttt gtgcttgcca ctggagacac
68001 aaagcagaaa aaacatggct tttattttct aatgagtga aaacactaggc
68051 atttaacaaa ttaaaacaga attggtggag tgagtacata gtaaaagcag
68101 agatgttgcc aagactggga gccaggtctc atatggggaa gtgaagggaag
68151 gattccacaga gaaggtcgta ttgcaactga gacatgaagg attagtggac
68201 ttttgcccaa gccaaaggaa tctacatgga aaagcttgga gcaattgagag
68251 aatttgttgt cctcagggca gaaagtgaag ttaggtagag ggaagagact
68301 ggaaggagc ttgacaatgt agacaggaat catatcataa aaagcattgt
68351 atgcttgcca aaggagttta gattttatct tatcaatata ggaattgcat
68401 tgaggaattt taacaggatg tgaggataat cgccttccat aataaaatga
68451 tatctcttgg tgtagtttcc tcccacaatt cctatgtgaa gtgttttata
68501 gatagtaaaa cattatttaa aatattatac atcgttattc catatttctc
68551 accctcatcc ccccaactctg gctctacagt ttattaaacg ctgagaagaag
68601 tcttcatctc ctctattaat ttgaaattc ctttattcct tctacttgtt
68651 aatagttttag tattatttta tgaagttaga ttccaagctt gttagggttt
68701 ttatgtagtg ttgtgttttt ttgttttgtt ttgttttgtt ttccaagtaa
68751 aatttatatt gaagagccag attagaaaca aatatttaga ggtttaagac
68801 ttttaggcgc ggtgcagtag ctcatgctgt taatcccagc actttgggag
68851 gccgagggcag gcagatcaca aggtcaagag atcgagacca tcttgccaa
68901 catggtgaaa cccgcctct gccaaaaata caaaaagttag ctgggcgtg
68951 tgggtgctgc ctgtagctcc agctacttag gaggctgagc caggagaaac
69001 acttgaaacc aggaaggcga gattgcatgt agctgagatc acgccactgc
69051 actccagcct ggccagcaga aaaaaaaaga aaaaaaaaga aaaaaaaacg
69101 tataaaaact ggcacatatta gagattgaa atcaaatttg aaaaagcgtt
69151 cttttttttg taaatatcca gatgtgact ctgttttagt ctgttttttt
69201 atatacacac cacactcgtt gctgaaatta agtttttttt ttcaacaggc
69251 acaagttgta tttaattagt gagaaatgac atttatgttt ctattagga
69301 ggaattgatt ggccaactaa ttgtgaaagt ttatttgcaa ataatacaca
69351 ccctactggt tctcataact atatagagaa agctgtggat ctgagaaaac
69401 tgagatgaag ctttcagtta gcattttgtt aaaaaaaata ctaccaagga
69451 aatttcaaaa ctatattagc aacaaaattt tatacaactt tatatcatgt

FIG. 1 CONT'D

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69501 ttaacaaaag atcaagggtta tgaactctcat ttctctcccaa gccacaacat
69551 cttaagtttt cctggcatct catctcttca tctggtgggc accatggaag
69601 ttttctaaat gaaaataaat aagctctttt ttccagatat ttattttggg
69651 atcttattta gaactctgac tcatcgcgat gtctatttaa ggcttttaaa
69701 tggaaagtta taacacatag aatgagtagc agaagggcatc aaaaacaaga
69751 acatccatgt ctccagaag ccaggcaacc tggaaactagg attgactttg
69801 ctatatgaaa ggttatcaat cttagctcct ggtcctggag catgccccag
69851 tctatttcaac tgcattgtgt tctttccagc tgtgctccca taccatattg
69901 tctaggactt acacacctct caccatggtc ttgggtaggc ctttacttct
69951 gttcttacct acagggctgt ggaactcaag gcaactgggg agggagagcc
70001 tcaggattac tctggcagtg atctgggtga aagaggtctt tgcattgtta
70051 cttgggaact tgaactcat ttttaacatt gtttatatga gaaaattgtg
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70251 atagrtgtgg ggaagaatcc agaatgaag ggaagcatatt gtactccaat
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70351 gctgcaacat ttttaaaaac tatttttttc tcttggaatt ccttttttga
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70451 acaattttgt atttgacagt ttgtgtactg ttacagggtt gataagttat
70501 taattttaaa ttatacagta agaatacatc taattttcat atgcatgtag
70551 tatattctgc catttgtgtt atacttgtgt aaatatataa ttctcaaaa
70601 tgttgcccaa ttttgtccca aatttttctt taccatttac tatagtata
70651 tttttccagt attatttgca catggtattc tttagagtga gtacaaactt
70701 tttccaatta agagaaaaaa agtcttcttt aagctaaagt aataaagattg
70751 tttcacttaa attctttagt ctgcttttgt tgtacagagt aaatcacaga
70801 aataccaaga tgaatttaga catgtaattg tattggaatc actgctttgt
70851 atactttacc aacatttgct ttactaaaag tatttttatg agttacaaaa
70901 gtaatatatg ttgtttattt taaaaatgga cagaagaaaa attttatcat
70951 aattccacct cctagagact aattactttt taaaaattgt ttctcagctc
71001 tttttctctt actttcttta cttaacatgag atcattttaac tctggatcct
71051 acccttttca cttaacataa gaaaataact atgctgtaat gctagtataa
71101 acattggagc agcaccttag tctagtaatt tagagttagcc agtggtttta
71151 cagccagcct gcctgggttc agactctggc tccgctctct actagttgta
71201 taactttggg taactctaac tctctgtgtc agcttctctca tctgtaaaat
71251 gaaatgttac tagtatatac tacatgaggc ttttatgaga aatgaatgag
71301 ttaatatattg taaaggtctt agtgcctggc acatgtttagg tactatgtgt
71351 ttgtttgtgt ttgtttgttc tcttatttta ttattttgtt tatgtattta
71401 ttttaataga gatgtggtct tgcattgttg cccagactgt tcgctaactc
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71501 aggcaltgag caccgcacct agctctcaa ctctttccat tgtgtctctt
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71601 gtggcataat ggttaagaca atggactctg ggcctggaat ggcataacca
71651 cttaattacc tgtgtgacca tggttgaatt atttaacttc tctcagccac
71701 aatttctcca ttgtacaaat ggggaataat ggaagctact tataaagtta
71751 taaggattaa atgagataat ttagggcctg gtacatgata aacatgcagt
71801 agatgttagg tactgttatt atcatcactc atatatataa ttattaccac
71851 tactagcacc caactcctta ccgtttttcc actgatacca tcaactcttc
71901 tacttctgtt tctgtctgaa cagaaacctc attcccagaa catgggtttt
71951 ctltataact tctttttgat ggttctttct ttctagcat ccagcaacttg
72001 tttcataaga ctagcaggtc aacatttaca aagtttccca ttctactttt
72051 aaaactttat caatgtatta actatcccac cctttttttt ttttttttga
72101 aacagagtct tgcgtgtgtt cccaggctgg agtgcagtg cgtgatctcg
72151 gctcactgca acctccactc cccgggttca agcaattctc ctgctcagc
72201 ctcccagtag tctgggacta caggtgcgca ccaccatgct cagctaattt
72251 ttgtattttt agtagagaca gggtttcaat atgttgacca ggtgtgtctc
72301 gaactcttga cctcgtgatc tgcctcgctt agcctcccaa agtgcctgga
72351 ttacaggtgt gagccactgc acctggctat ctacactatt ttgagactca

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FIG. 1 CONT'D

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72401 cagaattctg tgtcactttc ttgtctttaa tcaacttact tcatagtac
 72451 ttctcgtgtt tcaataatca taagccctgt gagagctgca tcttgagcaa
 72501 ctaggctgtc atgtagcaag ggttcaataa gtattttgtg aactaataaa
 72551 tgaaggactt tggctccctgc ctcaaaactt tctttctact tcaagttttc
 72601 actttttccc tcatggatat acctgtatcc gttttctatt gctgctataa
 72651 cagatgacca caaagtttgt ggcttaaaac aacacaaatt tattatacac
 72701 ttctgtagg: aagaggtctg aaatgagcct tactgggcta aaatcaaat
 72751 gtggcagag ccaaatcccc ttcagacact ctacgggagg acctttccct
 72801 gccatttcta cctgtggaga ttgtctgttt tcttgggtc atgggcccct
 72851 tccatttcca aagccagcaa tggccagctca ggtctttcat gttgcatcgc
 72901 tgactctccc acaccctctt ttactcata atgacccttg tgataacac
 72951 gggccaatca gataatcaag gataatctcc ctatgtcaag gttagtggtt
 73001 agtgccctcag ttccagctgc aaactgattc ctcttgcca tgtaacaaaa
 73051 catagtcaaa ggctccagtg actgggacaa ggaatctctt ggcggggcat
 73101 tatcctgcct accacaatcc cgaatcaata cctttgctac atagttccct
 73151 atcttctcaa ttccagttaa tttaactcta ttccacttta gtcaattcatg
 73201 gccacacttt ggaactttcc attactcaaa actgcacaaa ttctgaacc
 73251 ataaactcta gaatttttcc ttctcattac aaatttccaat ccttctatgt
 73301 ttggggaag tacatagggt atagattata aaggtttatt tactaggtaa
 73351 agtagtatga acttgatcca aacaaagtgg gaagtcaatg tagagtttca
 73401 tcatggaaaa aaaaatggct aaagccaagg agccagccct taaaatatgg
 73451 gaatatgtga ttatgcatat gtcttatgtg ctaactcttt tttttcccta
 73501 atctgatttt tattagaaaa atgaagaggg aaagcatgga cccctaggag
 73551 ataaggaaga gaggaccaga gtatctactg acaaaagaca ggtaaatttt
 73601 tatgatttca catatatatg ctcatataaa caaagcaaaa ggaatagtat
 73651 aaagttagaat aaaagtgcct ccatttctac tatcaaggga gtttttaaaa
 73701 tactcttcta aaaaatggct gtatatctac aagactatat gtcaactcctt
 73751 ttttttaaaa aaaaagtaac agatgggattt attctatgct acatcttaca
 73801 tctgtcttta aaaaaaaaaa aactcttgat ggttcatata gatgtgttaa
 73851 gaaatactct cccctagttc tctcacactc ccacacacct tgcgtgggat
 73901 gccagaatg caagggccctc accatttttt acctgggtca ttctcagag
 73951 ttgtgtttgc agtgatcaac cctgaaggtt gaggtaatat ctccctccag
 74001 gacaaaaagc aatctggctt actttctgct gtgaacacagt aggccctcca
 74051 agctcagtggt tctctcctta taacactacc caccctgtgt ccaggcagcc
 74101 atctgtgccc atttgtatta cccctcatgg ggcctgaggg caggaaacag
 74151 aaatgatgct catactgaet gctgtgctgc aaataataaa gttcattgtt
 74201 tctaacccag aagtttcatg tttcttgcta atatccatga aacagtaeca
 74251 ggtaaactta ttagtggta agtagggtaa aatcaaaagt cagacttgaa
 74301 agatgaacct tgttcttttt aatattgtat agtatttctt tgttacttta
 74351 ttctcttgag ttctccagag gttccgattc attggatgca gagtggagac
 74401 taagcatgta tgttttgaag agttaccctg atgattccga tgtatattcc
 74451 tagagatttc ctaattcatt ctgagagtgca gccagtagag aatatagaaa
 74501 taatttgtct cagaatattt acatgttttc ataataaaga aggccaaagg
 74551 aaaaaaata gtgaatcacc atttaagtca atgtactagt ccatatacaa
 74601 aacagactgt acccttttgc ccatgtttta gtgtaaaact ctgtgactag
 74651 gatcaaacag atgacttgcc aaatgtttag ggaagtggag caaaatcaaa
 74701 ttcagagcag cgattcaactg aaagatttca gtccctcggg agttgtggta
 74751 aatgggaagt ccaaaatgga atgcaactgt agcttttttt tgtttattgt
 74801 agtttgggat ggaaaaatct ttgtctcaaa ctgggtattt tggccctacc
 74851 tagatgcaaa atgaaaaaat acatattttc tgaggtaaaa aggactctag
 74901 acaaaaaggt gataataaaa ctgcagccaa aagattgttc taataacaaa
 74951 taagtgtgat agtgtgcttc tcaattgata ggaacaaatt tttttttat
 75001 gttttattct gccttatttt ctgtctgttt aactaggaaa atctaaagct
 75051 gaaatcattc ccttgacgac acttccactg gttacgttgg ttcaatttaa
 75101 caataggagc tctgtcaaga tcttttgatg aggcagcattt actcttttc
 75151 caagatgata cgtattggcc gggcacgggt gctcacgctt gtaatccag
 75201 caacttggga gcccgaggcg ggcggtcac gagatccaga gatcgagac
 75251 atcttggcta acatggtgaa acccatcttc tactaaaaat gcaaaaaatt

FIG. 1 CONT'D

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75301 agccgggcgt ggtggcagct actcagctac tccacgggct gaggcaggag
75351 aatggcatga acccgggagg cggagcttgc agtgagccga gatagtgcca
73401 ctgcactcca gctcgggcga cagagtgaga ctgtctcaaa tcaatcaatc
75451 aatcaatcaa tcagtccagc ctgggcgaca gagtggagact ctgtctcaaa
75501 taataaata acaaaactta ttgaaaagta tcagaaatca ataataat
75551 atgcttcgca ttgaggagc ataaaaacta agaaattttg gtaggggagg
75601 gaaagtgttc acaaaactca gttcaattta aagcttattt taaaagccaa
75651 tatagatagg tttttcatat ttatatata tctttaggta catattttgt
75701 aaagcagaga tttttgtatt cctttataaa tgtccttcta gtttaggaga
75751 tggttgggta actcagaagt ggaattccat aaaattctct ctgttctctc
75801 ttttttagat agtttacaaa ttattctccg taatctcaaa cattcatact
75851 caaaacgcaa actgaaactt gactagttaa tatcgctttg gtctgatccct
75901 taaagtgatt tcaatatatg tctattgggg gataagtata gggttaaatc
75951 cctttggaag gggatgggga atagggacac cctctcctta gcccaagctc
76001 cctcatgta acagtccagtc tctattgggg ccaagcccaa ggatcaggtt tacattcctt
76051 acttcagagg cttttgctgt gaaaacagca tagactgttt tgtgccttat
76101 gcagaaactga cttttttttt taaccttagt ctgttttttc tgatattggt
76151 ataccagctt tgatttagtat ttgtttaagt tctgaaactt taggttcaat
76201 agtaacacaa aaccttcaat caaagagatc cagtggaagt gcttgtaacc
76251 ccagtcagta accagctctgc agggottaat tcaaggctcag ccagtccttg
76301 ctctgtggaa tattgctaag gtactctcaag ctcaactact tgacatcaag
76351 ttctctcatc ctttttgaca ctgttaggta tgtctctctt ctttttgttt
76401 ttataactta cctatagtag gagggtgggac ctactaatga tagcttagac
76451 tgccatagtg ctaaaaattg atacagccga tagttttctca aaagaatttg
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76551 gacctctgct ttagtctgc cttttacca ctgtgggtct ttcagaaagt
76601 catgtaactt tctgggctt tacttataca tgtgtaaaat cagggtctta
76651 tattctttat taccatctag aagcttaata ctaaaaggta ctacacttaa
76701 tctataaga acaagtcaa attgatctag ttcttgcctt ttactaggtt
76751 ataattgata taatctttca ctagaacaaa ttaatgataa ttacatgctt
76801 aattgtttga tttagtagagc ctagggttag aaaattctgt gcctaaagtc
76851 aacactaaag ttacagaagc tttttggatc taatgagaaa tgtgctttgt
76901 acaaaactct tttagataaa gaattaaaca aaacttccat ttttattaat
76951 aattcaagta taatccataa tatgattatt aggtgttata actaataagt
77001 tgttatttta tatcttaatg taggtaaaga gaactggtct tgtggtgggt
77051 aaaaacatga aaattgttgg tctccactgt tctagtgaag atttacctgc
77101 cgggcagatt gctcttatta aacatgggtc aaggctgaaa aactgtgatac
77151 tttatttttc cagaaaaacca tgttctgctt gtttgaaaaa gatgttaaat
77201 ggtaagtcca gaaaagggtt tgttggggat taagagtatt tatctgggat
77251 gggcggtgtg gtttatgcct gtcactccag cactttggga ggacaaggca
77301 gggagatcgc ctgagccagc gagttcacaa atagcctgtg caactaggg
77351 agacctcact actacaaaaa ataagttagc taggcattgt gatgcacgc
77401 ttagtcccc actacttgag ataattgggt gggagagatt cttagaccca
77451 ggatgtcaag gatacaatga ccogtgattg cgccaactga ctctaagctg
77501 ggtgacagaa caagacctgt tctccagaaa aaaaaaaagc aagaagaggag
77551 cgttctctgt agagcagtca gtgggaacac atttgcataa taccacagag
77601 ataattttag aatatatact tgaagaatcg gtgctatggc ttgcacctgt
77651 aatccagctc actcagaagg ctgaggcagg agaattgtctc aagccggggg
77701 gttcaaggct gtagtgagct atgatgtctc cactgcaact cagcctgaat
77751 gacagagcaa gacctgtct ctaaaaaata aataaaaaaa tatgtaataa
77801 tatatctgaa gacagtttga tacattataa gagtaagcat cagaaaaaat
77851 ggaattctgt ctacttcatg tctactaacc tattaaatga ccctcagtg
77901 atgagtagac taatgctaac tgctataaca aacaaaattt tcagtgactt
77951 atgtactaga tatttatcac ctgtataata gtccagcaca tgtgttgcta
78001 aacagcagcg agctttctcc attgtgttga ttctgggct aggcattctc
78051 tgtctcattg ctgttctcac cctcagggct ttgagtcctc tgatatccaga
78101 ggcagactga gaaagaaatga gtagagaggg tgaacctgct tcttaaaac
78151 cctgacctgg aagtcaacata catcatttct gttctcatcc attgtgggaa

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FIG. 1 CONT'D

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78201 ctgttggtcc cactgggcag ctgtctttca gtgactacta tacactttgg
78251 aaggaggaaac acaaattttt aatgtatagc catccgtcca caccaggcta
78301 ttcactaaac ctccgtgtgc ttatgatctc gttttgcacc caggtatatg
78351 ccgatcattc ttcatattaa aaatatgcga tcttgttgca taggcacatc
78401 ggtagatcaa aaaacaaaaa aaactaatgt ggttctaatc ctttactctc
78451 gaggtgttat ttgggggcca aaataacaat ttaatatgat gcattatcta
78501 gtaccaaatc agcgatacac gttgttaagt atatttggtc tcagaggaga
78551 aatagtgtac cctgcagatt tccatatatc gaaaggctgg ggcctaaagt
78601 tgatcttgat gcgtcatagg tagaggaaag ggaacacatt cctggtcagg
78651 gggagacagt tatatggagt catcaagttg taagaagcaa agttctatgg
78701 gtcagtatct gaaatggaga attattcttg gagaacagtg gcagatgaat
78751 tatagtata gtggagaaact ttgaagaact gttagagcctt tggactttat
78801 cttataaaac agagtctcta ggcctgttgt gagaagagc tatttttatt
78851 tacagcaaa gcttaaaagt aatgatcaga tctatgtcaa ggtcagtgcc
78901 ttgagctata aatggcagaa ctctagaag aaatggatca tgtgctaga
78951 aacctctcgg cctgcaacaa gtaatttcag caggtaggta tctgtggtag
79001 tgattggatt ctatatcttc aactgcagtt accaatatcat tgaagaagata
79051 ggtatgaaag ttgtggtggc attttttcca ccttttcccc attaacagg
79101 cagattggac atgcatttca tcaactcatg tcaactgacc taacgttctt
79151 gttttagagt aatgtggaga cattgaagat tcttgagaaa gatgtaacgt
79201 gattgaaatt ttgttgttta ttgctgttat tgaattggag cagggagaga
79251 ttgagagatt ggagcttgat tagtagacta ttgcattagg caaggtccaa
79301 atagggttca gatgatgaca ttgatacaga aatgaaagaa tgtgaaagaa
79351 ccaaaacatt ttgttgctga tctgttccag atcaaaaagt aaaaaagaa
79401 aaaaagatat tgtgtcttgt gctgagctaa cttgtgtgaa agcagttcta
79451 atagcctcgg agccacaat tagaggaaag aataggagag tgcaggtaac
79501 tcatcactgc ttgatgtctt aagacatttc atcctgcaca aaaaagataat
79551 gaagtatgga aagtcaggaa ggacctacag tggaaatgtg tigtatgtg
79601 tgttggaaca tatataaaca aaattgctat gttagattag gcttatgtat
79651 tatatttagt tatcttagga agggggcatg gttgaacccc atgctatagc
79701 tagattactt tagttagaat tgcattacc tcaagtataa ggcaaaagatt
79751 gttgtagcac agtggttctc caagtgtggt ctgtggactc ctgatgttcc
79801 acgaggtcaa tgttattttc ataataatc taccttcagg ttggcctagg
79851 tggctcatgc ctctagtccc aacattttgt gaggctgagg caagtggatt
79901 gcttgagccc aggagtttga gaccagtcat ggcaatatgg agaaaaccca
79951 tatctactaa aaatagaaaa attagctagg cgtggtggtg catgctgtga
80001 gtcccagcta ctccggaggc tgaggtggga ggaccactgg agcctaggat
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80201 tctttatttt tatttttatt ttttttgaga cagagtctcg ctctgtccac
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80351 agcgtgcacc agcatgccgc gctaattttt gtatttttag tagagacag
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80451 ccactccagc ctccgaaagt ctggggatta caggcgtgaa ccactgcacc
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80551 cgtcatatcc ttcaactgcac tcagagggaa aagagaaaac cagtttaca
80601 taagaaggtc ctgtgatgaa cagtataaaa tatcaatttt attaaaacc
80651 aacttgagtc tgcattcttt taatatctgc tgtgaggaaa caggaggtgg
80701 gtataaagtg ctcttgcctac agacctaaag tatgaagatg gctttaagga
80751 aaacctagta ttgtattgtt tgagtgcag actgacttat ctacttttt
80801 aatggaaacat catgaactga caatggttag ttgactgtg atatttgga
80851 gatattttct tgaataata gtgaacctgt cactttcaga taaacaactg
80901 acagtatatt ttgccagtga taaaattga gctatcaagt gaaaataga
80951 attttggaaa actcatatcc tctatatag gctgcagac atctcaccac
81001 tttagactct ttgatgggat ttgtgtgtgt attaatgaac gggattttt
81051 ttaatatgtt aaaaacgata aatcatgtt ttcggatga ccaatgcaca

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FIG. 1 CONTD

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81101 atgctacaaa atcatgcatg agtaaaagcc attctaagtg caagacagac
81151 caacggactt taacgtaaac gttcaaaaag ttgtgtgata tggtttcaga
81201 ttctacattg taactaaact ttaagaaact atcccttgct aattttttat
81251 gtatgcccac agaagaatat tcacaagtat ctgaaatggc tgttataaata
81301 ctcccttttct aaccacatat ctatatgagg ccagataaatt ttcgataact
81351 tcaatgaaaa caacatatgt caacagattg aaaaacagaag caaatttgag
81401 catccagattg ttctctatta agccaaattt ttttttttac aaagcaagtt
81451 acctttattag aatttttaaac aatgtataag tgatggaatc atctcaacaa
81501 cacatctatt cactgcttac aattccaacc aatttcagtt ctctgatact
81551 taatgacaag agcgaagacc tgttaaaagt ccttcaccac gtaaaaccca
81601 cagctcaaaag ttgtgggagt gattaactga gccatagacc ttcaattcaa
81651 tgtttaccac attaaataac cacacagtggt ttcttataaa ggccaaccac
81701 ctgggaacta attaacatta gcattaagat ttaataaaac tgttaggcac
81751 agggctagat caggcattat aaaaacctgt ggttccctag tcaagtcaac
81801 caaatcccca aatattttag cttgtaacag tttgtcctt cctctcttga
81851 gacaattatt tgggtacttg cttttggcaa taacgttaatt ccaatgggaa
81901 gtttctaac ttgtgatggt ctttaggcac ctccggagaa tgaagataga
81951 aattatgcatt gattatataa catgaagagt ttaattttcta ttacacactc
82001 aaattccatt ccttgatttc tcttaactct ataaaacacat gtaaatcttc
82051 tgcagagctt taaagagctc ttaggcagac ggcccacacc tgcaatccca
82101 attgatagca tagtacaggt caggcgcagt ggcccacacc tgcattccca
82151 acattgtgag gccagtgagg ggaccacctc aggtcaggag cccaagacca
82201 gctcggggcaa catagcgaga ccccatctct accaaaaaaa aaaaaaaata
82251 aagagctggg ttggttggtg cacacctgca atccagacca atctggaggc
82301 tgaggcagga ggattggtag agtatgggag ttagaagtta cagtgaagta
82351 tgatgtcacc actgcactcc agcttgggtg acagaactggt ctctatttaa
82401 aaaaaaaaaa aaaggtatag tgatacacta ttaattccat gtatgctaatt
82451 atgagatagc atccataaa actactatca agtctttatg tgcagcttac
82501 tgtataaagt cttttcaagt ttaactcact gaattcataa tgaattatga
82551 ggtagctacc attatttccc ccattttaca aatagggaaa ctgaggctgg
82601 gagacattat ttaacttgcc caagtttcta aagccaagta ctggcgaaac
82651 tggattttga acctaactaa tctgattcta gagcctgtgc tatataaact
82701 cttaaccact atgctatgct attcattagt atccatttaa caattactac
82751 tattgcaata gctgcaatta tcaactctat agtacagggg aatctatcaa
82801 agaaaaacac agctttcaat tatctatttc tgaanaacat ttttattaaa
82851 gtataagggt catttcaact atctattttt ataattgtca atttatttaa
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83251 tcaattctac aaatttttgt ttgggaaat agtttttttc ataaagctaa
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83351 taaaatttt aaatttgtt ttaactttca agtacagtaa atatcagtag
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83501 ttggccacta atacacaaat gtcgtgtcaa agaggatttt tccctctgtg
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83601 cactgctggt taggaaaatg attatgagaa ctgacagaga gggaaggtga
83651 aatgcaaccg gaggaaacac tctgatatga ggtttgaggc ctccaaaatt
83701 gctttgcagc ataaagccaca gtgagtcagg agtaccaggg agtggataga
83751 atgtttattt gtttaactga gactttttag ttcatcaatt attttgaagg
83801 gtagaacact ctgtgggctc tctttctatt tgctctggg tacaatcaac
83851 aaaaaaaatt ctctctagc tgaatttaca tgcagtacta gcaagggggt
83901 ctctttgtta taactgttc attaatgac gaacatttgt gtacttaact
83951 atgtataagg catctcatcg ttcaatttca aatacaaaat aaaaattttt

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FIG. 1 CONT'D

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84001 ttccacatttg ttatcctgtt atgttttttc ttttacaatt tgtctgttcg
84051 tatctttttg tctctcttta ggcccttatt ttgtcaaatc atatgtgtctg
84101 taatgaattg aatatatttc ttgtatataa acattactaa cctttcctct
84151 gtccacactga ttgaaaaatg atctatttag ttgttgtttt tgtctttaat
84201 tttgtaagct ttaaaaagtt aatottgccc ttccgacacc atcccaacat
84251 cacataagaa ttttttcatg ttataaattc ttgttggaac tatttgataa
84301 ctgttttatt atgaggagga ccataaataa ttcaaccatt ccctattttt
84351 ggtcatttag gtttttgggt ttgggttttt tgtttgttta acgtctttgc
84401 ttgctatttt aaagaatgct gcactaaatg tgcattgcat agatttcttc
84451 tctgtattta gaatttttct ctagaatgga ttctcagaag aattctcagt
84501 ctgtggagag gaacattttt aatgcatgga agaggatttt attccagata
84551 gaaaactagg caatatttagt tgttccctgt aagattttta aaaaacagcca
84601 tggcaccatg gaggactctt cgagtatata gttttagcgc tgggctttg
84651 gatcacactt cacaacacca gtaactccac aaatgcattc cttagaggctc
84701 tgtgagaggc tgggtaactt tttcttgaaa aggccagata ataaatattt
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84851 taaaggttta ttattggata ctgaaatttg aatttctgac agttcgatgt
84901 gtccacaaat gtcttttga ttgtctcaac ttttttaaaa tgtaaaaccc
84951 attcttaacc tgtgagctgt acaagagact gcagtgactt ggatttggcc
85001 tgtgggtggt agtttgccaa ccttcaggct atataatagg tgaattggla
85051 atagacattt attatatgga gggttctaga tatactgcaa tgatagggtg
85101 gattttataa tgaaaacctt aaattcagca tgtattccat aattaccttt
85151 cgtattttgt atttcagctg gatttaacgc aatttccatc tggcctgtgt
85201 atccagaagt aagtttgctt acggaggctt ctagtttctga agatgcгаа
85251 ttatagtcca aagcagtgga aagattgaag tcaaacagtc gggcccatgt
85301 gtgtgtctta ctccaacct ttgtgtgtta tatggtgcag ttgttagagg
85351 agacctctta caaatgtgac ttattcaaaa aaattacaaa aacattgccg
85401 gatgctaaca ctgaacttta ttatgaatgt aaacaagaaa gaataaaaga
85451 atatgaaatg ttatttttgg ttccaatgga agaaatgcac aagcaaatac
85501 tgatgactat aggttttgag aacctgtgtg aaaaaccata ctttagcaat
85551 ctaaggcaaa acatgaagaa ccttatccta cttltggcca cagtgcctc
85601 cagtgtgcgc aactttaaac acttcggatt ttaccgtagc aatccagaac
85651 agattaatga aattccaact caaagtttgc ccacagaaat tgcaggccac
85701 tgcattgttc aggccagatt attggcataa cgaactggtg agttacatag
85751 atcgtaaatt ggggctgatt ggttgggttg tatttgcctc tgaagtgtc
85801 gtctcattta tggtagagtt catttactca tagttactta agttttgctg
85851 ttcatacaat atagagaagt tagtgagacc cttagtagta caactcttcc
85901 tcccagcagt tttgggattc ctgtagacct tatattcagt accacatttc
85951 tacatcagcg cctcattaat ctaggccctt cttctgctt ctgtctttta
86001 tgatttcaat gttccttgag cctccacta aaggtaggac aagaagagaa
86051 aggagagccc cagtgcagtg gttctgacct ttctaatcaa caacttagaa
86101 ggctgagaca ggaagatcgc ttgagctcag gagttcaaga ccagcgtggg
86151 caacatagca agacctcgac tctaaacaaa aaattagctg ggcattggtg
86201 tgtctgggtg tgcgtgccta tagtcccgcc tacttggggc gctaaagcag
86251 gaagattgct tgggcccagt agtttggggc tgcagtgcag tacaatagca
86301 ccactgtact ccaagctccag agccacagaa agactctatc tccaaaaaaa
86351 gaaaaaggag aaaaacaaaa ttattcattt ttgttaactc ttcaatattt
86401 tgatgtactg aatatttaac aatttttaaa aaacttttaa aataacatta
86451 attcaaaata actaatgaaa tcaaggtaaa ggaattggtg ttattgcaga
86501 ttcttccagt tgcgtgatg tcttcaatca ttctcaatca aacatttttt
86551 actgtattgt attaaattgt atatttgaaa aagggaaaata ttacttggtg
86601 ttctttcttg ttatgataaa agatggcatc tgtatttcca aacatggaa
86651 aatattatca catcttacct gatgtaagat ttctcaaatg agaattcatg
86701 tcacttttta aaatgcattc ttgtgataaa ggggaaaaaa calagacagg
86751 aggagcagta gtagtaagatt tgtttgggga gtgtactgta gttaggattt
86801 aaaattatcc caagaaaaga gagaaaagta tcagaaaaag tctctacaga
86851 tgctgctggt ctgcagtagt caacagaagg gaggttctca gctggcagca

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FIG. 1 CONT'D

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36901 aatagaaatcg ccaattgaaac ttttataaaa agtacagatg ctatactttt
36951 tactttttata aaaagtacag atgctatact ttttactttt ataaaaagta
37001 cagatgctat actttttact tttataaaaa gtacaaaacc caaaccagac
37051 ctattaaacc aagtccttaa caaaatatgg ccaagtctta tgttttttaa
37101 agttccacaa ggtgttctga ttgtccaga gttaataatt gctcaattct
37151 tcttaaaagt ttgtattctg taggcacaca ttatatgacc ccaacaattt
37201 gcaattgtga aaagctcgtt ttcatgtaat tatatcttat tgtgggttat
37251 atatttgttt ctttgccaac tccagctttg taaagaattt ttctgtaaac
37301 cattcaaaaa gatagaaaac ataaaaggga acagctgttg tagctataat
37351 tcactaatta cccctcacta attagaattc agcagaaccc tgcctgtgtt
37401 ccagagtaag agggcgatgt gaatctgcta ttttactgga tcttagtacc
37451 tcttgccttc catagaaacc ctatcatac cagctgtgat tccagtgttt
37501 aaagacgcag tatgtataca ttgtcattta tattgtttat tagatactct
37551 acactactgt atagtataa gtatatacca tattgtgcag aattttgtac
37601 ataaaagccct gcttacgcat ttgatggcca atttaaaaga tttttcaagg
37651 ttaattgttg gtgatttttt ttttacctgg aaactcaact ctgaataggg
37701 tgcactcctt ctgtcaacta ctctactcca ctgtgcactc ttccaggga
37751 gaaacctgat ctttaactatt ttttcttag cactaaacac aatgtgcgtt
37801 gaatggataa aacaactctt tttatccaaa gataaagggt ccacactccc
37851 ttatgcaaaa cttttggagc caaatgtaaa ggaattcaga atttttcoga
37901 ttttttttta ttttttttga gacagggttt tactctgttg cccaggctga
37951 gtgcagtggc actcaatggt cactgcagcc ctcaacctct cagcctcaag
38001 caatcctccc acatcgacct cctgagtatg ttgtactaca ggtgaaccac
38051 caccatgtcc agccaatttt taattttttg tagatatgct tcactgtgtt
38101 gcccaagctg gtctcgaaat ccttggtcta agcaactctc ctgcttcagc
38151 ctcccaaaagt gctgggatta caggcatgag ccatcatgcc caatccagat
38201 tttaaaaaagg taatatggta catatactgt tatataggac tcccagtggc
38251 atctgggaca gtacctgtga atcacattaa tacatacaga gtgaaaaaag
38301 taggaatttt tgcactaaga ataattgagg gctataaata actcaatttg
38351 ggtcagattt ggccgcaaaa taagtgcata aaactccaaa aaaactggat
38401 gtaaaagatt tcagatcagg gactctggac ctgtaattct tccttaatga
38451 taaataataa caatgacagt ttatggaaac cctactatgt gtcaagcact
38501 gagcttggtg atttatatat gtatctcatt taacatttag ggtacttcag
38551 taagggtgat atccctatga tcagatgcgc ttccaattaa gcttttaatt
38601 tcacattatt cagtttggtt tgaatgcctc atttctccct aattaataga
38651 tgaagatacc atttcattta aaaaagtaca tatgattaaa atgaattcca
38701 aaacctctaa caacagagtt ctaaaagtga ttgaaagtag ttgcttataa
38751 ttgctttttg aatgatgaat aaagagatc catagagatg tcatgaaaag
38801 tatgttacta gccaggtgcg gtggctcccg cctgtaatac cagcactggg
38851 agactgagcc aggagagact cttgagggcca ggaattccaa aagtatgttt
38901 ctgaataecc cgaaggtgac aaaaaagtg gaaaaaaag tgtttagact
38951 cttggggaaa aaagagcagg aggaaggcat caaaaactct atctatctgc
39001 ttttaagtact gagttgtgat ctcttcgtgt ctgtcttct catcagatta
39051 ggtgttttcc aaagctaagg attatgcctt cctcctgggc cacagtactg
39101 ataatgagag taggtcggag taatcaagaa agttaacttt taaaacagaa
39151 ctcagtggtt ctacagatag agtatgectg agaattcagg gggagctcag
39201 gagtaatgca gattcctaag ccttgcctgc ctctctcaga gaggttgatt
39251 tagggagctt ccatggaagc caggagttgc ctcttttttt ttttttttaa
39301 attttaaaaa caagcatcca gtaattttga tgcaagagga ctgtggagca
39351 ccttggacac tgacatgacc acaggtattg gagctaaaaa aaccacacct
39401 gtgttctaga acaaaaaagt cccctctgat ttcaagtat caaagagccc
39451 caggaaattg actcaatgat tgaattgtga ccttctcttc aaagtgttac
39501 agagaaaacc cgtgtaatga ccagatcata gggagcaatt tctgtaaaaa
39551 ttatagacat gaaaagattt ttgagaattt acctcatctg tccacagcct
39601 tgatgctgag tgacatcaaa tctgttttat alggatgaaa atttattcct
39651 attttaaaag acaagtatga aagaatattc tctgtatgta accaacctta
39701 gctaggcagc agagctgcac gctgatggaa aaatcacatt tttttttccc
39751 tcttaacaag gtttagtctg tccccaggct gaacagaaaa aagtggtctc

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FIG. 1 CONT'D

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89801 tgtgactaag aaacataaca tlaaaaatat gcagtggtta tggtagaaaa
89851 gggggccttt aatatggaga atttttatct tggtttttta ttttttcatt
89901 ttgattttat gcataaatta aataaaactt taagattttt ggttttgacg
89951 gcaaatataa tcttatgttt ataacctgtc ccacttaact tagaaatagg
90001 cataaagcca ttgatttgta ttcttgccca ctcatgttaa actctaaagg
90051 tctaggaagg aacccaattt tgtttacacc aaaaaccctt ttccctctac
90101 tctgtagaag gaagtcactc cgtgcactct gctgttcagc ctcatttatt
90151 tcttctagag cacagcacat aaagtactgt ttgtttccct gttgctgttc
90201 tctttcacca tccaactgta agtcgtalga ggaagggact acaglttccc
90251 tcaccactgc atcctcagtt ctacagatgc ttggaacata agaggcatct
90301 aataaaatgga aatttttgtc aaggatttct ttttcttttt tttttttttt
90351 tttgagatgg agttctgtct tgtccccagc gctggagtga agtggtacga
90401 tctcaactca ctgcaacctc cgctccagc gtttaagcaa ttctcctgcc
90451 tcagcctccc aggtagctgg gattacaggc atgcaccacc acacctggct
90501 aatttttgta tttttagtag agacggggtt tcacctgttt ggccaggctg
90551 tgtcaaggaa tcttttatgt cccgtgcaaa ggtggaggaa aggccaaagca
90601 gtttgatctt ggagggtcaa tctgtctaac ctttagggtta aaaaatgagt
90651 atctagaataa ggaattttac ataatattata caaatgcttt gtggtataat
90701 catgaataaa catgtttaac ataatattata caaatgcttt gtggtataat
90751 ttigaaaacc aggttttgtc tgaatttgag atgggaattt ttatttagag
90801 atcataactg ttttaaaagt aacctcttaa taagacattc atctagtatt
90851 ttaattgcaat tgtggcacaa attttcttg tacctttact ggaagttagg
90901 tafttaaaaa gtttatcatt ggaaggatct acctttagga aattgtaggg
90951 tgaataccagc ttttcagtta atctcccaca aaatgaaaat gctttagggt
91001 aagttcacag ataatttgta ttttctacgt gtaaatgtgc caattaacta
91051 ccttagtccc ttattaagat ttgtataaat actatgggtt tcataattag
91101 tghtaattgt cttagaaatt tgaactcaaa cattgtatag aagaaaaaag
91151 taaatcctta atagtatgaa ttctattttt gtttttaaat ttctgtttc
91201 agattaatgg ttttaagaag tacagcttta cttttgcaa ggttttggtt
91251 ctacagggaa attataatct tatgtttgtt tataactctc gctatttgat
91301 ttagaattgg gcaagatgic attaacttgc atctcttttc cctcaaggta
91351 aactgaaggt caaagaaaag acaacatttt gttlaaatca gaattctctt
91401 catgtacttt ctagcaaatg atagatagat ccataaagat ttgtttatgt
91451 tctgtatgaga agtttgaact tttttcttag caagaacatt ttcataagat
91501 atattttcca ttagtagagt ataaataatg ctgggaaaaag acaaatttgg
91551 ttgttgtgaa cagttattac acaaaatcca ttagtctgca aacctttatt
91601 aaattttatc acctatcaga agtagttgtt tagaaaaccg cttgttaatg
91651 gagaatcaat gaagttgcac ttagtctcgg ctacagcttt gagggacctg
91701 actgtggaca ctgccattta gtggcctcca ctacgtatg tgtgactgag
91751 ttggtagtga ctctctctag ttatttggtta cctagctccc atattccata
91801 cttaaaagtg ttatttttaa tacttttctg taattagtga agatacaagg
91851 attgctgcta catttaigaa taagttttca atacaagttt ttattacttt
91901 tggaaaaata tatttctaaa actaacatat cataattttt actgagttaa
91951 atgccatata tctttcagag gatcataaaa caggagttag ggcagtcatt
92001 tgggcagagg ggaactctgt aagtatgaaa acaattcttt aaatttttaa
92051 cctggatttt gtttaaacct agtcagctct tcggtgcatt acaggttact
92101 gactgccaa gggggcagat cacaaggatca ggagatttag acctcctgg
92151 ctaacacaaat gaaccacctc ctctactaaa aaaaaaaaaa atacaaaaat
92201 tagctggcgg tgggtggcgg tgcctgtagt ccagcttact cgggaggctg
92251 agacaggaga atggtgtgaa cccggggagg cgagcttact gtgagcagag
92301 atcgtgccac tgcactccag cctgggtgac agagcagagc tccgtctcaa
92351 aaaaaaaaaa atattaatat ttttgtaatg gtgcatttat gaagatctat
92401 aaagatttgc tcatccctca acagttttct agatagacgc attcattcag
92451 caaacatttg ttaaacactc tctacaggtt aggcactgtg ccacagttaa
92501 tgcctgggat taaagatcac atttttatgc ctcatagttt agtgatggag
92551 atgtagaagt aaaataaac tgatatgtaa gtgtaattat aactgatac
92601 atgagaacat agagagggaa cctttgctgt gaaaaaaag taaactgtg
92651 tggatgaat tattaatggt actaatataa tattcttgaa gaataagata

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FIG. 1 CONT'D

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92701 atttcttcag acagagcaag tcaataggac caggaggata acatgaatat
92751 tcttggtagaa cattcttttt ttttttttt ttgagacagag tccccctctg
92801 tcacccaggc tggagtgcag tgg:gcacac ttggctcact gcaacctctg
92851 ctactctggat tcaagtgatt ctcatgcctc agcctcttga atagctggga
92901 cctataggcat gtaccaccac acctggtcca ttttgtatt tttagtagag
92951 atgggatttt gccatgttga ccaggctggt ctggaactcc tggcctcaag
93001 cagtcacacc tcttctgctt cccaaagtg ttgggtacac ggtgtgagcc
93051 accatgcctg cctcgaatat tcttaattat aatatttaata atgttaaaat
93101 tcttgaagat taggaggata tcatcaggca gagcaagtta atgggaccag
93151 gagaataaca cacagagact ggggtgagag agagaatatg ggaatacga
93201 tttgatttgg cacatagagt aagcaacaaa atggagcggg ccatgaagaa
93251 ctctatattc catgtaaaga ttttggaact tatcctggca gtgcataact
93301 atagcacagc actaaccagt agagagaaaa gccaaggtcc aaactgaatt
93351 ttataatttc taggtgttat atalatatat atatatatat atataiatat
93401 atatagagag agagagagag agagagagag agagagagag agagagagag
93451 agagagagag agagagagag agagtctcac tctgttgcca ggctggagtg
93501 cagtggtgca gtcctgagctc actgcacact ctgctctctg gggtcaagca
93551 attctctctg ctacagctcc ccagtagctg ggaactacagg tgtgtccac
93601 cacacccagc taatttttgt gtttttagta ggatctgggt ttcaacctgt
93651 tgtccagaat ggtctcaact tcttgacttc gtgtccaacc tgccttggcc
93701 tcccaaatgt ctgggaattac aggtgtgaac cactgcaacc agctggagcc
93751 atgtttttaa aaggaagaca gataaattaa ttttaagaaa atatttaact
93801 atgtaatcaa taataaatta ttgatgaaat attctgcatt taataaatat
93851 taactcttca aaattctatg tgtattttac acctgcagca cctctcaact
93901 tagactaacc acatgtggct agtggcgact gtagtgggaca gtgcattcca
93951 agaattgtct aagtggggaa atgatttgat cagatttgca ttataaatag
94001 aatgaggtag ggctagacag aaaataagga gattaataaa aagagatgag
94051 gacttggaga tgtggggatg ggttaggagg ctgaaatcaa gagatattta
94101 gtaactatat agctgactga aagtgagacc tacattttgc ctacgggact
94151 tcacagaaag taacttgaca atttgcttgg atgttccaca aactcctcaa
94201 gttcactcat ccagtactct cctctgtaac ctccctccct atcagtggtc
94251 accacttgtt ctgttactgt acacatacaa tcacctagca caatggattc
94301 caccctcaaa atacctcttg actctactta cctgtacccc aactgttaac
94351 tctactaga atactaggct cctctgccag aaattcctca gcactctgta
94401 caacttgtct gtgacattca tcacagttaa agttatctgt tcaatttctt
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94651 ccagcaggca gccaggtgaa atggaagac acatggctta gagtcaagta
94701 attcgggctt gaattctggc tatgttaact atctattttg tgaccctaga
94751 caattaatca ctctgtctct cagtttccct atctgaaaa cagtaatat
94801 aatagtatca ctctttagggt tgtttcaaga attgatcaaa tgaaatgatt
94851 catgtaaaaa tcagtatggc tgggtgcagt ggctcatgcc tghtaatccag
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95051 agatggggag atgacttgag cccaggaagt caaacctggg tgacagagtg
95101 agacccctgc tctaaataaa taataataaa aataactcag catgatgttt
95151 gacatttagt aaattgtcaa acagatttat taatgagata atattttgtt
95201 tgcaggcttt tgttggctca ctattacatg atttttatga agctgtcata
95251 gtaatgagtc tgttgatatt atcatgagta attataatat atgaaatttt
95301 aatgagtttt atgcatattt ccaaaaaaact attacacaca cattactaat
95351 atttcatctc aataattgat aaagcattca tatatactac tatctctctt
95401 taaaagagaa ataaagacca ttgaagtaag aagttctata ataatatgca
95451 tataatagag gcttaataaa tactgaagat gaaaatgcat tttttatttt
95501 ccaactaaat cacaatagca catttttagc ccaacagaaa ttttctggtt
95551 aaagtattta aaagtttttg acttgctaac cagtagcatg gcacagagca

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FIG. 1 CONTD

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95601 cataagaat taacaatcac ttgttgagta cctgctatgt acagaatact
95651 cgaacatggt gaaggggatg aaaagaata tataacatgg ttctgtctct
95701 ccaggaatcta taatttattt gggaagtaat atctgaatca agtgaataaa
95751 ttgttagtgt aagtaagata gtatttaatt aactgcaaaa aacaaggact
95801 tccttgagat tatagattag agagggtggt ggctctcttg gaatttagct
95851 ttgacaagat cacactgcag taggaagtatc tggattataa ttttttgata
95901 gctcagttta ctgtagaaaa ttgaatgaat attcattata caaagatga
95951 tagcaagcct caaaaataca ttgcaaaagt tcttttcaga atgttgaac
96001 taaccattgg ttgtctcact ctclgagaga agtttgatg gaacagggtgc
96051 catgtacttt gtaggatgtg gttacaatgc ttttctggtt ggcattcgatg
96101 atgctgactt cccacacatg gatgacaagc agaaagacag agaaaatagg
96151 aaattcagat acatcataca tgcggaacag aatgccttga catttagta
96201 tgaatacctt cttggtgtac ttttcttaa aatgtagcaa gggttggttg
96251 aaattaattt tcttataatt gtaatttatt tcttttttca aattccaaga
96301 aagtttcctt tcagaagtat aactttggtta aagcttggtc ctactgccca
96351 gaacctgaagc tatgaacctga cctgaggtca tgcctctctc aggtctctcc
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96451 gcttttaagt tatccttttg gaactctgga agcctctcat attctggatg
96501 gtttaaggctc ctttgttttt laaatcttgc caacgcatatt ataatcacag
96551 ttacacggcca cagaagaaca ttttgagcaa cgtatggaat catgcacaac
96601 gtgttccccat aagattataa cagagctgaa aaattcctga gtgaagtagc
96651 cattgttaaca tcacacgtta ccttttttat tctcagatgc gcaaatactt
96701 accatttgtgt tacaatggcc tgcagtatcc agaataggga tttataatga
96751 accaaattgc tcmetaaggag ctttgttagt tgattatacc tttaatttga
96801 catcattttt acaaacactt ctacgctctt accattaagg ttaagggatt
96851 aaaaaaactg gtaagacatg actcctgtcc ttggagagct tctaatgcaa
96901 taggggatat gagacggcat ccacctctgt ctgtggattc tgtggaggga
96951 gcaaatgtaa agtgctgcgg acattctgga gctgctatgg acaaatggga
97001 gagtgcgaag gaaaggcttt aggggaagac tggcatctga actgagcttt
97051 aaaggattcc tagactgggg caattggaag ggaagggaag accattcttg
97101 ctctagatcat aagcaacggc ctagaagtga gaaaatccgt ggtgtgttta
97151 ggagcatgaa tattccagtt aggttggaaat gtggacacaa gggaaagaca
97201 gctcacaagg acaggctggg actggactcg agaggacttt gagtttatgc
97251 tccatttgtt aggcagcggg gaaatggaat ggcattgaca gagccatagc
97301 ctatagatta tgtaggtagt attgtttgaa cagactagat gcatagaatt
97351 ctgttgccct agtccaggtg aacgtaaaata acagtctcaa caagggaagt
97401 ggaatgtgaa ggctgcccgt ggaggaaatt gaagtggctg gctgagagct
97451 acgtaaagcct cagaaccggg aagtcagctc ttgcagcccc agttgttagt
97501 cctaaactac cctcagcatg caaaaattca cccaaaattc cctctattct
97551 tttcctgtgc ctcttcaata cagatttact tgcttcattt tgtcacagg
97601 tgtgaatata tcaaalagaa acttttcttt ttaaaaatta cctatgatag
97651 ggaagggtga aggggaactat aagctcaaaa agaaacttaag tatttgata
97701 ttcatttagt aaacatttat tgaacttcca ctaggtacca gatagggtcg
97751 tgtcatttgt ctacaagat gagttagtgt ctacttcca gtattctaa
97801 cttaaggatc cagtttcaaa ctgaattcca gtattctaa caggtactta
97851 tttagaagac atgggggtt ttttctctct tcttttggtg tctgtatctt
97901 cctgatttca ttatttttgt aattctgaaa tgaacctctt acttagaatc
97951 aataaattat ttttagttat aataattgtc atgttcaggt tgatcatata
98001 cacttttgtg ggtttacata ctttgaacat ctgtaattc agcaagtcta
98051 aggcttgatg atcatatta ataattgcat aaatctgttt ttaaacaagc
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98151 aacgaccttt ctgatatttt alaaattttt ttgtagggtg caagaaataa
98201 aaccagaaga aagaagcatg atttttgta caaagtgccc atgtgatgag
98251 tgtgtacctt taattaaagg tgcaggcata aacaaactct atgcaggaga
98301 tgtagatggt ggaaaaaaga aggcagacat ctcttcatg aggttcgggg
98351 agcttgaagg tgttagcaaa tttacggtaa gtatatacac attttttca
98401 ggtgtatttt gtattatggt gttaggtaac ctgctgcaat attgttaagt
98451 agtgattccc acccttttaa agagtttcaa caaattatta ttatttatat

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FIG. 1 CONT'D

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98501 tattattatt atttattat tattatttga gacagagtct ctctctgttg
98551 cctaggctgg agtgccagtg gctcgatctc ggctcaactgc agactccgcc
98601 tectgggttc aagtgatctc cctgtctcag ccccccagtg agctgggatt
98651 acaggcccgcc gccaccacgc ctggtcaatt tttyattttt tagtagagac
98701 ggggtttcgc catgtgtgtcc gggctggctc caaactcctg agctcaggty
98751 atccgcccgc ctccgtctcc caaagtgctg ggattacagg cgtaaagcac
98801 cgcgcccgcg cgagtttcaa caaatatta ttattattga gtttatttat
98851 atgtgcaaac ccttacctaa ctgcaactgt tcagctaagg attcctgcct
98901 tatgaattta catctctgta gagaattgag ccagtggtac ttttggtgcc
98951 atctggtggc tgataaaaga aaaatctctg acccatctct tccctctcct
99001 ttctggctta gagaggtgga tagaggtgaa aatacttcag cagtccccac
99051 cctttctggc accagtgacc ggttttggg gaagacaatt ttccacagat
99101 ggggttatgtg ttttgggatg aaactattcc acctcagatc atcaggcaat
99151 agattctcat aaggagcacy cagcctagat cctcaggtg tgcagttcac
99201 agtaggggtc lgcctctatg agaattctaa tccaccgctc atctgacagg
99251 aggtggagct caggcggtaa tgcctgctcg cctgcactca ctgtgctggc
99301 tgcggcccag ttcttaacag gccaccggacc agtactggtt gctgccaaag
99351 gtttggggtc ccttcgaata gtttaaaggt cacccccacc cccaacaata
99401 gggaggtgca cacacacata cacacacatt tctcatgaga aaaaacagga
99451 aaacaagaat atttgtttat ttatttata attatttttg agatggagtt
99501 tcactcattg cccaggtctg agtgcaatgg cgtgatctcg gctcactgca
99551 aactcagcct cccgggttcc agcgattctc ctgctctgct acccccaccc
99601 cctcccccac acccccagtg atctgggatt acaggcgcac gccaccatgc
99651 ccagctaatc ttttgyattt ttaataatag agacggggtt tcaccatgtt
99701 ggcagggctg ctcttgaact cctgacctca ggtgatacac cggcctcggc
99751 caccacaagt gctgggatta taggcatgag ccaccacgac tggcccggga
99801 aaaaaaagt ttcttatttg atagttccaa aaatgtactg aggtagtcca
99851 tggaaaacac aagaactttt aagttcttat acctcttcaa tatttgggtt
99901 ctggtttttg tgggtttttt ttttttttt ttgtcttttg tttttgtttt
99951 gagacagggg ctccactatc caccaggctc ggagtgcagt ggcgccatct
10001 tggcaatctc tgtctctcgg gctcaagcga ctgcctgcc tcagcctccc
10051 aaagtctcgg gacaagaatg agccaactgt ctacgctat ttgtgttttc
10101 aaaaagcttt ttatttggaa aaaaccttaa gcatacagaa aagtataaaa
10151 aacactacaa agaaaatttt tccgaagtg tgtgacatg ataccagctc
10201 accctttatt tctcctaaatg agaaaatacc acataattac aaccataaaa
10251 atcaggaaat taacattgat acattactgc cactaatcca cagattccag
10301 tcaaggttca ttactgtccc aagaaatgtc ttatatagca ggtttcccca
10351 acccctgggt accagttaag aagcttcttc tgtattttat gtaactcccc
10401 attgctcaca ttactgtcta agctctgctc ccggccagat cagcagcgyc
10451 attagattct catgtgagtg tgaaccttat tgtgaactgc ccatgcaag
10501 gatctagttt gtgcactcct tatgagaact taaagcctga tgcaccccca
10551 ttctcaccac tctggtctgt ggaaaaactt ccatgaaact gtaacctggt
10601 cctgtgtgcc acaaaagttg gggactgctt ttatatagca aaagatcct
10651 gtcagaatc atacattgtt tctatgacat ccaatgattt aatcctggca
10701 ttgaatgagt taatgtaaca tttaactact agaatttga gtggggaaga
10751 aaatgatata aaagaacctg ttatatattt cagcttttca ttcttgccat
10801 atacatcagt ttgagtcagg gatacctgga acatacatat atatgattaa
10851 ctgggacata taacataata ttatatatgt atataattt aaatatagaa
10901 acatactatc cagttgtctg catgtgtata tgaagtatac taagttttta
10951 ccatittgtaa tatttgtatt tttttctaat tgtcttattt aaagtttatc
11001 acattttttaa atgagggggt gttgacatgg cactgaaaga aggcagagat
11051 ggggaagata ccttttttgt aaaactcaat aaaagcttat atccaactag
11101 tcagagaaat ctctacttcc gtttttttgt ttctgtctc ttcatctcct
11151 ctgaagagtg tgaataaata ggtttttcaa gttctctca taagaattaa
11201 gtgacttaat cataaagatt aaggactatg agtgatgggt tatggagaa
11251 tctgaaatat ctgtcttact ggtagatttt aatagctttt caattgtaaa
11301 gagaatgaag agatcagaag aacttaagaa agggcaagag aagcagaagg
11351 aggcagaag actaagggtg tcttcagggg cagagatgg aaagggaagca

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FIG. 1 CONT'D

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101401 cccagttggg ccagaccctc ccggaataac cctcactcag gcacatgttc
101451 caaaggctgt tgttcatggt tgttctctgt tctacctcca gtgaagatga
101501 gctgtccatc ttctcatcct tctcatctgg cctggctgca aatatatgt
101551 agatggttag ctagatacct agttttgtaa atccaagtaa ttaacatgaa
101601 ctagaatttg ttctaaatct gaatttcagt accaagatta tcaaaaatga
101651 tgtgtgtcaa taaatttggg attgtttttt aagattaaaag caaattgaaa
101701 ttactttgaa agattttttg ctttcccttt tgataagtta ccatagacct
101751 tgagataagt agttctatc tgtgtgtgtg tcacaaacca ggctaggact
101801 gggcaacact gtttccaaga atagatttta tcaatctata tccatgtcca
101851 catactcagt tctttgtttt ctctttaata tgtgtggatt ttctctatt
101901 aggttatatt acttattttt attatgaaag tagtatatgc tcaattgtga
101951 agactagaaa aataaaaaag aacgtgtatt atctcacaac tcatagatag
102001 cacaattaac algttgctgt attttctgcc actaaaagtt ctttaaaaaa
102051 tatttttaaa aatttaacac aatattccaa ccatagggcc taacttattt
102101 aaccattccc atgttgttgg acacctggat tgtttctaag tttttacagt
102151 tataaagaagc ctttttatga atgtccttaa acataaaattc aggtattactt
102201 gtttttactt tgtctgcccc acattttttt ttttagtggg ttgacgtctt
102251 tcaaaaaaatg cctaattttt cctctttttt tggtaatttc tcatgtagctt
102301 tcttaccctt tctaagttct acctctttct tgggtgcagc ctaaacacac
102351 ccatctgttt aaataaccaa ccatctctag atgtctctcc ttccagggga
102401 ctttttaatc atgtgtaaat gtttgtctgt tatctcatcc cccctcaagg
102451 ctctgtatgt taactagtta atctgatgag tgaactgatg cttatgggaag
102501 aggcctccgg aatattccata ttgtgtctct gagatgggtgc cctagcagagg
102551 ccttttggtt agtcattag tgattctgat agagatttca tccagctgag
102601 aaaagaaggg ctgtgctata agataccgat tactctccat tttttatttc
102651 tctcgcccca atattctatg taatatctgt gaatcttca gcttccatc
102701 ttattcctga atggttgaga tgaataacag taatcagagg agatatatga
102751 tatgatataa aatgatatga tgcaggtaat agtttatgat ataacacat
102801 taaaaggcaa ggtaatcctg gtcataattt cttttctctt tctttttttt
102851 ttcttttttc tttttttttt ttgtgagaca gagtcttgct ctgtcttcca
102901 ggctggagtg cagtggtgca atctcggtc actgcaagct ccacctcccg
102951 ggttctcgcc attctcctgc ctacgctctc cgahtagctg ggactacagg
103001 caccggccac cagcggcagc taattttttg tatttttagt agagacgggg
103051 tttaacettg tagccaggga ttgtctctat ctgacctcgt gatccacca
103101 cctcagctcc ccaaaagtgt gggattacag gcgtgagcca ctgtgcatgg
103151 cctatcttgg tcatattttc attctttaat acctaggcct ttctagctta
103201 ttataagatt ctctaggacc tggagataga atacaatgcg atgttaattc
103251 catagtactg ggcattgggt ctaattctat tgctctcgtg agttagggtg
103301 taacctgaga caagtcactc caatctctgt gtcttccact tacttccaat
103351 taaaatgaat gtaagaatc ttcaacttct ctaaggatgt tgattcggat
103401 cccagaagtt atactatcca ggaatcacta gtgtggcggt attagggtctt
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103601 cttacctcag cctcccaagt agctaggact acaggcgctg gccaccaagc
103651 ccagctaaat ttgtattttt tattaagagc ggagtttccac catgttggcc
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103751 caaagtgcgt ggattacagg ttgtaacctc tatgccagc catttttctt
103801 ccattttttaa gaagtgtgtt tgaattttaa aatcaatgtg ctggaatgct
103851 atgtatttaa tctcttttaa acaagtaaaa tgtttgtgca cttctacagt
103901 ggcagctgaa tccatcagga gcttatggtc ttgaacaaaa tgagcctgaa
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104001 gaaaggatat acagtgaatt ttaatgatca ggtgatgaaa attgtgttaa
104051 tagatggagc atattatttt tgaaggttag atttttgcca ttcaattttg
104101 tcataaatat ttgtgggtct accatatgct aggtgctatg gaaagtgcgc
104151 attaaatatt actcctatag aatctacagg ttaatacaaa taattatgca
104201 caaattgact ttataaatta aatgcatatg aaacagtaaa cagcaatgct
104251 cttctataac aaacaaaaag cttattgggg agtgagaagg gaaaatatg

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FIG. 1 CONT'D

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104301 tataattagt acagatggat tgggaccaa tgatgagat atataacatt
 104351 ttctagagta aaccacatt tgcccagatt ggaatgttc tggtaacttg
 104401 aataactcta ttaactaaga atcatcacag ctaccataat gaattactag
 104451 tctttaaagc ttattatttc gtatactact acagatatatt tgaatgtaat
 104501 ataactcttg agaagtccta caattcttta ggcacataat tttagatgat
 104551 agtgctatat aatattattc taaaatagta actataggcc aggtgtgttc
 104601 actcacgcct ataactccag cactltggga ggccaaggca gggggatcac
 104651 ttgaaatcag gagttcgaga tcagcttgcc caacatgggt aaacctgttc
 104701 tccactaaaa atacaaaaaa tagccaggta tcatggcaca tgccgttaat
 104751 cccagctact tgggagttg aggcaggaga atcacttgaa tccaggaggt
 104801 ggaagtgtgca gtgagccgag atagcgccac tgcactccag cctgggcgac
 104851 agggcaaaaa tctgtctcta aaaaataaaa taaaacagta actataatt
 104901 cgaattattt ggatttgaag taaatggaag ttittctgaa gttttcttga
 104951 taataacaat tttttaacct tgaaaaatca agaagtataa aggtctttaga
 105001 ataatttttc tgtgaatata ttgattttca gtgtctgaa ttgactttat
 105051 ttgattcaaa tagaaaaatg attgtttgca atttgaaaaa aagtcacat
 105101 ccactgcate ttctttttta aaattttatt agcaaaaaag gctgtactta
 105151 tctatctatc tatctatcta tctatctatc talctatgac tctgtctctc
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 105251 aagggggcaa tgaataattt cctatgttag ggaaggata caaaaagcac
 105301 gaatcataaa aaggttaatt tatctatgct caaatgaaga atatctgttc
 105351 attaaaatat attactagcc caggtgcagt ggctcacacc tgaatccca
 105401 gtgctttgga agcctgaggt ggggtgaatt cttgagccca ggaatttgaa
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 105551 gagggtggaag gatctcttaa gcatgaagag gttgaggctg cagtgtatcca
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 105651 aaaaaaaaaa aaaaaaaaag tatcaactca agagtgcaaa ggcaagccat
 105701 ggaatatgag aagatacttg ccaattataa tcaacaaaag gcttgtatct
 105751 aggatttatt attcctagat tactaaggaa aaggaaagca tgcgtlgtt
 105801 aaagccccaa gatttgaagg aggggacaaa aggaaggctt ctggtttgct
 105851 ggcaatgttt tattttattga cccagatgat ggttacatat gtttgctttg
 105901 tgacagttca actgaacagt taagtttatg ttatgcat tttagaacaag
 105951 tgtttgatct cagtaagcaa taccocattt cctttttaat tataatgat
 106001 ttttactgat atgtaattca tctatcataa atttgcttct tttagatatt
 106051 cagcaagtgt tacaggcate actacaacat aatttcagaa cattttcat
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 106151 tccccctagc cctaggcaac cactctttca gtttttatgg attagtcat
 106201 tctggccatt tcatataaat ggaatcatac agtatgtaat tctttccaa
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 106351 tgtctaactc agagggggag ttgtgctggt atactctctc agtgccagta
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 106551 taagaacaaa atagagatga gaaggcattt tctagaatc tgaggagcaa
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 106651 aagctgggat ctgagatcag gtctgggtct gctgcaaggt gagtgaactg
 106701 aacttagttc acccaatcaa cacatgaaa gatgattaaa ctatttagta
 106751 gtcagagaaa tgcacaattaa cattgcacgg aagttagctt ttttttgctc
 106801 tttttttttt tttttttttt ttatttagac gagtctcact ctgtogccca
 106851 gtctggagtg cagtggcgtg atcctggctc actgcaacct ccacctccca
 106901 ggttcaagag attctcctgc cttagcctcc caagtattct ggaatacag
 106951 catgcaaccac catgccacgc taatttttga ttttttagtag agacgaggtt
 107001 tcaccacgtt ggctagcgta gtctcaactc ctggacctca ggtgatctgc
 107051 ccgctttggc ctccgaaggt gctgggatta ccggcatgag ccaaccaagc
 107101 tggcctgaaa tagcattttt tataagcgtta tgccctagag aaactcttgc
 107151 atattgtata agagtccagag agacaaagaa ttgtgtgcta tattgtttt

FIG. 1 CONT'D

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107201 aaaagcaaaa actggaata acacaaatgt ttgttttggg tggttagata
107251 aaaaattatt ggtgtattcc cacaatggac taccatatag cagtgaataac
107301 aaatgaacta gagctacatt ctccaacatg gatgaatctt agaaatataa
107351 atgttgaatt taacaaagca aactacagaa ttagtatacc attctgtat
107401 aaagttcaaa aagacatacc atatatgggt taatgtgggt aggcgaagca
107451 tgggtgtcac acctataatc ccagcatatt gggagactga agcgggccaa
107501 ttgcttgagc ccaaggattc aagcagacc tggcatcac agcaaaaacta
107551 catctctaca aaagatacaa aaattagtt tggcatgggt gccgtgtcct
107601 gtagtccagc ctaccgcaga ggctgcataa ggaggatcac ctgagccagc
107651 gaggttgagg atgcagtgag ctgagatcac accactgcac tccagcctgg
107701 gtaacagact gagacagacc ctgtctcaaa aaatatataa ataaataaat
107751 aaaaataact ttaatatata gtatatagag taaggttatt gtaagaagc
107801 aatcgattga taaacacaaa aatcaagata ggagttgcct ctgagtgagg
107851 tgaaggggga tgggacgaga gagggagcgc acgggaattg ataattgtct
107901 agttgttggg ttcggcagta tgttttgttt ttttccatc tcccccaaac
107951 acacataatg tagttttatt cagttttaaa caaactgtaa cttttttggg
108001 gcagtaagtt catgagtggt catttttatt tatattttac ataatgacat tatatatagag
108051 ctgtattatg tttcaaatat tacatgatat gatgagaaca agaaagagag
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108151 aggggtggct ttccagatct acctctggaa ggcgaagctg agccctggcc
108201 caggtgtcct taggacaagg aaacagcagg gcagacaata caggctcagg
108251 gcagggaate cctcaaaaga tggggaagaa ggggcagaaa gaagcttttg
108301 caggtgatag atatgttcat tgtcttgact gtggggatag ttcatgaaat
108351 gtgtacttat gtcagaatac atgaactgac actaagcaaa atgtctcctt
108401 cctgtgatcc catcattttg ggaggtctgag gtggaggatt tgcctgagcc
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108601 taaagctatt aaacacaaaa gccagggaaga ggttgaagcc atactctttt
108651 cccagcctgc ccagtcagat aagtcgtctc tcttccagt cccagatlc
108701 tccctaccac acacacagtc cctctctccc ttaggaggtta cattttatt
108751 cttccagctc agtaatagga cgtcccccca ccaaaaacat aaacaaaaaa
108801 gttttatgaa ttacttgcgc tacactgttg agtgaattca gtttttgggt
108851 tttttttttt ttgagcagg gtctcgctgt gtcaccaggc ctggaatgca
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109251 aaagttcctt taacttaangc attgttttgg tttcaaca tgtaagctg
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109701 agggactgat ttctatttat ctgacttta ttagtaccaa ttgaaaggg
109751 tctgtctcac aagaggtcat gccctcgcag ggaatcacac accttttag
109801 aaatattaat tcttttgaa tacaagagtg acagttagta aactgtcca
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109901 cacatttata ccaaaagctt tctagtaate agaatttact taattagaat
109951 tgactcataa aaataaagtt agtggaactt gtcctcattt ttaaaagata
110001 ttttgtaaat gttaattctg ttgtcctgtt tatcacagac ttgggttagc
110051 aatagggaag gagtgttatt ctgagacagt gtcgtcgtt gatatacact

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FIG. 1 CONT'D

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110101 actcttgaaa tcactaacag tgaacctcaa atttggttat gatgttaaca
110151 gagaagaqaatt atttgagctt ggaattattga aactagcttt cctagaattc
110201 cattataataa tgcctgctccc ccatatagtc ttccctctcg tataattaac
110251 atagggtgttc tcatggcttt gatcttcaaa aggaagaagcc ttttaaaaac
110301 atttgccaac ctcaagaata aactactgaaa gtcttgaaa gtatgtcaat
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110451 cctagggttag agaggggtgg cctgggggtc ttcatgaaa atgtcttctc
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110551 cacatcacac ggcctcactg ggccttctac cagttttctc gaattacacg
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110701 cataaacact acacagatgg agggcatggg ataggacagg agaggaggtg
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110851 attgtattaa ctctcatgct tcagctcttg gatttgttgt ttctaactaa
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111051 ttgaaagggg aaaaatagcc atttccacag tactattaaq agaggcatga
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111201 gaggtgtgtg tgtgtgtgtg tgtgtacttt ttaactgctg aaccctcagt
111251 tctagaacag tactctggac acagtaggca ttccataaat atttggattt
111301 tgattgaatg actgctcaac actgctagac tgcgggggat agatgtgtga
111351 gaaatgcctc ctgatcttaa gacactcaca gtcaagtggg agatcacaaq
111401 atggaatcaa gtaattaaqa aaaatgatc tcaggccagg tgccctggct
111451 cacacctgta atccccagac ttggggaggc tgagtgggtg agatcaactg
111501 aggtcaggag ttcaagacca gccctggtcaa catggtaaaa ccccgctctc
111551 actaaaaata caaaaaaaa aaaaaaaa aaagctaga catggtattg
111601 catgcctgta atccccagca ttggggagac tgaagcaggg gaatcacatg
111651 aaccaggagg cagaggggtg cagtgaactg agatcatgcc actgcactcc
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111751 atgtctctgg accagcagac tattttgttag aagtgcata tcttaggggtg
111801 ctccctaggg ttactgaatt agaactctc aggggtggggc cagcaagctg
111851 ggggttccag accttgcggg tgattctggt gacctttaa getgagaact
111901 gccattgtgg atgtaactgt aggaacagtg ggggcacacg aggatttacc
111951 agcactctgg ggaatcatgg aaaggaccct gttagggcag aggtgatgag
112001 gtggggcctg aggggatcca ggggtttgcc aggtaaacag tgggaatgag
112051 acaaaattct gggaaaaagt gatggagaca gactgtgag ccaccccagg
112101 agcccgcctg ggtttggaga agctctgtgg ggcacttttg acccagatct
112151 ataaattccc agtcttcact ccttagctgt agaaatcaga acttacaact
112201 aacaaaaaaa tacaattgtc ttctaaattt caaagaatgg gaggatgatg
112251 gtaagttcat aatttgraan aaaaaaaa aaaaataaaa atagctctgc
112301 catttgttta ctgcctaagt ggccacagaa tatgtactg tgagggggagc
112351 taagtgttag catttgctgt gcttcttcca tcccagtcac gcagaacata
112401 cgcaggtgtg tgtaatttca tcttattgct gtgaagctct ttcttctct
112451 ttttcaagac agggctctac tctgttgccc aggctggagt gcagtggtgc
112501 cttcatagct caetgcagcc ttgactgttt tctgtgtctc agcggctctc
112551 cccactccag cctcccaagt agctgggact acaggcacgt gccaccacgc
112601 ctggctagtt taatttttat ttattttttg tagagacagg ggtcttgcta
112651 tgttgcacag gctggtcttg aactcctggc ctcaagcaat cctcctgctc
112701 ctgcctccca aagtgccttg attacaggca tgagccacgc cgcctggcca
112751 agttagcttt atttctgggt caatgaatgg taccaacact ctataaacat
112801 gaactctatc tttagtgaca ctatgataca taaatgagct tatgcacctc
112851 gaatgtctat atctaaaccc acgtaacact tgggaaggag aaagaagaa
112901 gtgagcccat cttgggacag gagctccttt ggtgagtga gcacagagt
112951 atttgttagg gaaagcacat gtcttccag aaggacatga gccagaactt

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FIG. 1 CONT'D

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113001 tctctgaata cttcccacca ccccatgatt ctcagaiaatt ggggtccagg
113051 ccaggatgaa cgagaaagaa accacagttc atcccgatgc tgacaccogt
113101 acccagagag gccggggcgg gggatgtatc ccaaggacaa aagggtggag
113151 gaggaggcgt gggggagttc acttctgtgt gagtgaatgg aaacagcctg
113201 gctctgccta atgtgcatga ggggctgggg gtggctttaa cagcttgaa
113251 taccttggtg agtgtgtgag cacattcaca atgttagaaa aaaaacaaaa
113301 caagagctaa gcgagaagtc tgaataactg tgggtatga tctgttgag
113351 ttgcaagaaa tggaaagctg tgagccggga ggccttctgt tggcagatcg
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113501 cagggtcttag cttaaccatga gccaggcact gtgaggagtg cagttacagt
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114001 aaaaaagaaa gaaagaaact agccaggcat ggtggcggtg gctgttaact
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114101 gagggttcag tgagcccaata tcgtgtcact gcacttcacg ctgggcaaaa
114151 gagcaagact atataaaaaa aaaaaaaaaa ttgaccatg acccttaacc
114201 tcaagattct gtgacttgtc aggttggaia aaaaatgtat taataaagta
114251 tagatgtgat aagctttaat aaagagcagg ggaatttaga gaaactgtac
114301 caagcattaa atgtattatt tttagtaacc agaaaatctc tctattgatg
114351 taattaaagt ttatagtgt ttgagagccc aagcgacagg gaccacttga
114401 agccaggagt tcaagaccag cctgggaaac atagcaagac cctgtctctc
114451 caaaaagaaa ctaaaaaatt agccagttgt ggtgggtgac acctgtagtc
114501 ccaagctgct agagggcgtg aagcgggaga atcacttgag cctaggagtt
114551 caaggctgca gtgagctatg ctggcaccac tgcactccag cctgggtgac
114601 agagtggagc actgtttcaa atagaaaaaa aactgcatac agtactttac
114651 tctcagatat gagtgtttct gttgaccagg aattttacca ttccgtgttc
114701 tctgatgcgg aggtggcctt gtgaaaggac acagtttctg ctgagctgaa
114751 cacgctttag tghtaactga tgaagaactt ctagctggtg tgcggtattg
114801 gtgaaagtg ttttattttg cagaaaaagc acaaaatcca cagagggcaa
114851 cagttatcca ttcaactcat agctatctat tctgtcatga cagactacc
114901 cctaaaactt agtggcccat gccactattt tattttgcat gattctgtga
114951 gccaggaaat tgggcagaat tcagcagaac agctctactc cctgtggcac
115001 tggctggggg catggacggt ttgtggccac tgggtgggtc gttgagaggg
115051 gggccagccc ggccagaggga cagtgaagct ggaccatcca aggggctctc
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115251 tgctggctca tggatccagt gccaaaggca gtttctgtgc cacaccagaa
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115501 ttacggcaat gctaacagtc actacacacg gttctgaaia ccttcaaat
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115601 cccagatttt agttggcaag tctgagaagt tctgggtaac tgttttgctg
115651 caacaacgtg ggtatttctg aaagtttaaa gatctatctt caacatgcta
115701 gggaaagcca ccatgatagc tagtctaata atgcccagac catccctcca
115751 ttgatgaagt gaaggtctac attttaagat gaatatggcg cagggaggtt
115801 tcaactttct tgctgtgagt tgatgccaaa gtgataaacc ttggtgcttc
115851 ccgctccct gtctcctggg gatgggccag aatcagatgc catcaggagc

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FIG. 1 CONTD

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115901 cctgcaggca attctgagaa ttctctttaa gaagacacct gcaggagggg
 115951 tgaaaccgctt tctagccctt ctgcagccag ccactcctccc tgccttttga
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 116051 ctgtataaaa ggcctcaatg agaaaaggcg cacatgcatt tctgtaaaaa
 116101 atgcatcagt gagaaaaaca acagcagcag caacaacagc aaatatttac
 116151 tgaatctcct agtatgatcc aagcccccaa atcaagaaaa tgtgaatgct
 116201 gatgtaaaaa aggaagggtat ttgttcaaac tgcttgccca gtgtttttga
 116251 agaaaaacga gatctccaga gacctccttt ttggtcctaa gtgacaagca
 116301 acaagttcca ttaaatgtgt actgtttatt tgtgatgtct ccaagcagag
 116351 tagttggctc ttgttalata tctggggaga taatcaatga ttatgtcttc
 116401 tgacagtctt atcatagcca ttacataaat ggtcatgtgt atttgtagct
 116451 ttaataccct ctgcataatg ccttaatttt taatgggatt acactgtttt
 116501 gctgtttgga ctttgcctgt ttaatcatag ctaagacctt tctgaagtca
 116551 aaactctttt ccatatcac agtgaggcgt tggcaaaaaa gtgggggctt
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 116651 attggagctc tgaattcaca tagtccagtg ttatgcaca ggcaccaact
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 116751 ccctggcaca catccaccaa atgccatttc aatcaactag aaattctac
 116801 aacaacagaa ggcctcccaac atgttgggat agtgggctgc ccttcttga
 116851 gcacagctga tcatccaac cagtggtcag cgttgcac tcctcttcaa
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 116951 gatgaagaag tcaccacctc ctgaagccac attgcgctgt cctcattatt
 117001 aacatgttat ttatagggag taaactcttc cccctacacc cctcagacc
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 117101 ggagtactgt aaagtagcca ttgtgtctct gctgtcctgt gacagccttc
 117151 caactctcct ggaaacttac ttgtctaatg tagctagttt tgcattttac
 117201 agtgaagcat ttlttacttc acctcattaa atgttcacac tgtgaagcag
 117251 ggtattagcat tcccaactga cggataatga aatggagctc caggltlaac
 117301 gaacttccca aggtacacat gctaacgatt ggcagagcca gaacatgaat
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 117401 tttttctttt tctttttgag acagaaatgtc actcctattg cccaggcttg
 117451 agtgcagtgg tgtgatcccg actcaactga gctctgactt cttaggctca
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 117551 ccaccacacc ttgctaattt ttgtattttt tgtagagatg gagttttgcc
 117601 atgttgccca ggttggtctc aaactcctga actcaagcag tgtgccacc
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 117701 caaatatgcaa ttcgttttgt ccagcctctc cctctgatgt cttcattctt
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 117851 aactgtttgg gggactttgt ttccataaga ataagatgga aatgtcctg
 117901 tgtgagtttc gacattaggg tcaagaagcc ttgtgttttc cactttggct
 117951 ttctgcacat accaaacatc cgaagcagag ccaccaccag tagccagcag
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 118101 agcaatacat ttctccaaat tccaaaagc ttccctttcc ccaaggggtt
 118151 cctttccctt catctactgg aagcctgtgc tagcttttcc aacatctccc
 118201 tctgttttat tccacaacac actgctgcct ttctgtccc cctcccaatc
 118251 ggaagtgctt ccccaactcc tagtggccta acctgtctgt ggcctgtggc
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 118351 taacgcttac ctcttgcgg cctcgacctt ttcttgtgtt tcttatctct
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 118601 cgtgaggaaa gactggcgtg gggggagtg gccagggttc ccgccagaga
 118651 ggtgttgcag gactccagcg gagaagcgat gcgcccacac agggcattag
 118701 ggtcaccaga acccctgttc tgggcaccca tgccttacc tgcagagctg
 118751 gagttttgtt tgcagacctt agtctgggac ttacatttta tcttatataa

FIG. 1 CONT'D

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118801 atctaggcat ggtcagattg caccacaac tgcagcttgt cctaccgctt
118851 gctaattttg ttccagacac taatttaggc tcgctctcag agaccagggt
118901 cactcaggca ttgatcaat gtgttacttg tgtccatccc aagtcacatg
118951 taatgttgaa tagaaaggcc ccagcaggaa cacagtaaa acgttactct
119001 ttcttagcca ctagaaggct gcatgtccca gaaatttgat cagggtgctgc
119051 ttagaagtga aactagagaa ttgtgacact gttgggttct atggggtttg
119101 gagtttccag ggcggggggc cagagaggag ttagcacac tggggagcag
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119601 tcactccagc atccgtgtgg aatggaggga ggaagaaggg aattgtagtg
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119701 aagggaataa agggaggggc agagggaatgt aagtgaaactg agcagaatcg
119751 gggcagagtg caggggggga gaatggcagg agccacccaa caggagggga
119801 gggggaggga atgggaggga agggagggtc acctggaaga tgtgaggggg
119851 ccaaggagtg aggaagaaa gaggaaaagt aaatgtgtct ttgtaaaagg
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120151 agcagaagga acggtatcag ggaaggccct ttgggaggga tggaaaagca
120201 gccaggcttg ctggacttgt tgcaggagga aggctcgccc tgatcctgtg
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120301 gaagccacta gaggggtttg gggcaggaga gaaccatgac cagatgcgac
120351 ctatgaaaag atcaactttg atgcttgca agatggggtg cagtccaggt
120401 gggagccatg cagatgcaga gagctgtcta gatgggacac aagtctcaga
120451 agcagaatat ctgatgaatt ggcctcaggt gagaggcaga gagaactcat
120501 gtgccttctt gggtttctgg catgaacaac tgggggaatt tcaggggcat
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120601 atattttgaa ctgtaccttg gagagaggga gccctgagag catccagcca
120651 gcaggtgagt gcatgcata gcttgagat tgcggaagtc gggccggagc
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121551 atgctcagtt cccagggaaa agggcagagg ctttttcccc tgcaagaaga
121601 ccagctcgca cctagggcct tgcccgtttt cccaagagt cctgtgata
121651 tataagcacc atctgtccct gatctgggg tctcgtgcaa gacttcccca

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FIG. 1 CONTD

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121701 gggcggggct ggggtgacac agctaggccc tggcctggag ttcaaccacc
121751 ctttgtcctg atggcacttt ataaaaacac tgcagcctg gtctctggga
121801 taacagggtt acaagcctct ggatgactaa ttggccctca gaactaactg
121851 gatcaaatac aaactttggg atgatattgc gtgccccag gccagggtga
121901 gacctagact gacgatggac actgccattg aaaaaggaca tgggaacctg
121951 ggggtccccc tgcgtcccgac ccaccccac acctcgggtt gagggtggat
122001 gtatgttaca gataaggtta aaalacaaat gaggcaggtt gaaaagttgg
122051 gtgggtccgg aggtttgaat cgcagcaagg aatggatcgc ttctcttcca
122101 cccagacctc agctgctccc taaattctcag tgaccgccaa atcggtgccct
122151 ctggcccacg tctttcttga gcccccagact cattttgcc acggctgcct
122201 ggacatcccc acgccacgtc tccaggcaca ggacactcgt gtgctctgct
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122301 gtaccccacg ccacaggccc atgtctcca gaaatggttc agctatgcbt
122351 ggtcaatagt aaatcctaa gtctctccaa gtctctagc tgcctgcctct
122401 gggctctggg ttgaaatcct gcaccacat ctgctcactg tataattggg
122451 tgagcaaccc tctcagtcct tgtttccatg cctgtaatat tgggalltgt
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122651 caaaaaatgc tcttaggagg acagtgcgcc atgaaactacc tgtccagcct
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122751 tcaaaagcaac aatacagtc tcaactttcct tcactcttgc ctctcttcat
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122901 tatttaggtt gacaggataa tcacagtacg cacctcataa ggtttctgaa
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123001 gagtctgcac tcgctgttac cagctggcgc tcactcatccc accctccctc
123051 attgttcccc ctccaaggccc ggctccagag ctctccccc ccagacacac
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123201 ccacatgccc cggaacaaag gcacacgcct cgtcatttcc cagccatgct
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124151 taaatgaaca aataaatgag tagttgaata catatttttg ctttacagct
124201 ttaaatatca gaactaaaac taaaaggtag ctattttttt ccaaccttcc
124251 ctaaaaggata aattatcaat gtatatgtca acatattctc caaaggggacc
124301 ctatgatcac agtattttaa agtaaacacag atggctctca gtggagtgat
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124401 tgtgtgtttt gatggcgact ttatttttag gtattgtaac tgccacatgt
124451 cctccatgag gaggaaagta tgagggaagg cggggaccctt ggcaggtatt
124501 ggaatgtcat ccaccatgaa cttcagcctc ttagcccca tgggtcgtgg
124551 gccactggga aatggtggaa tggctggctg agtggcaatc gctcctgtca

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FIG. 1 CONT'D

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124601 ggaaatctaa gctaattgta tgtccaactg aaaaagaaa ccaagaaaa
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124701 tttaatttta ttttctacag atgaagtctc gctacgttgc cttagcttgt
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124951 ctacgtataa cagaggtcta attagatctt ccaaacatca gacaaccaag
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126851 agagtacagg tcactcaggt gccgcggcgg ctctgcgaag ggcactgtcc
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127351 tctagtccac aagagactat tcaggaccaa aactgtatg gctttctatg
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FIG. 1 CONT'D

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127801 attccccgtg acccttgttg atccactctc ttctcgtcca gtgtctcccc
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130251 ggtctcgtga aatgcactct gtgatgttcc cacacaaagg acatgcctta
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130351 cacttcacct ttctatcac ttctcaagt cactagctag gagcagctgg

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FIG. 1 CONTD

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130551 tcttttttaaa caaataaaac attacaaatg gaaccaaacc ctcaacttcc
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130651 caatccttat cctcctatta catagatatt taacacataaa caacatatag
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130901 gtaactctag tactttggga ggcgcaggtg ggcgcatcac gaagtcaggA
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133151 agaaaaatag aaaacacttt gagacaaatg aaaaacaaaa caaataatat
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FIG. 1 CONT'D

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FIG. 1 CONT'D

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137601 aaatgtact ggaatttgca gacaggcatc actgggtcaa ttccactgaa
137651 ttcatctact gtaccataaa cctaaggaaa atgctaagtt tgtgccagg
137701 ttttaatttt ttctgtgtt ttatttttta tggctctgta actctgccgc
137751 ctctaaaagt agttgctgac tggagtcaag taatgcaata gtgcatgatt
137801 ccttgggggc agccaggaca ctggtcaagg cctgaagata acacactgat
137851 gataaagaac acacttctaa ttcaaggtat atggaagcaa gtcttttgaa
137901 tattatgtcc agggtagaaa ttttttgtt tgtctttgtt gtcccgtttt
137951 tttaaaaaat gtaattttca aaccaccccc aaacaaatga aactaccagg
138001 gacttctcct tttagaatgc gccttattg cctgtatccc tcaagttaca
138051 taacatgcct gagagatgta actctgtgag ttctcaggcg tggtagagag
138101 aaggcaataa tcatgaccac aactcaata tttttagttt agaaagactga
138151 aaattattgca ctctccattt taaaactgaa tgcatttcat ggaataataa
138201 atatctacat cttaacacaa tatccattaa ttcatctcaa attctatttt
138251 gccaacaggg attgagccag acnaagttat gggaggttag tcttctgcgt
138301 tgcctgacct actgccttgg atgcgtgctg caagcctgga atgctctgta
138351 tatgctcctg ttacggttat gtggaagcta ctccaagcaa aatccacccc
138401 catcgaagtg tcaataaagg caacctgtct ctattctata tgactacaca
138451 tctgagtaat aatttagaat attttgacac aatccttgct agtactgact
138501 agagacaatt aactttttcc ttgttaagaa aggacttgat tgttaaatct
138551 gcaagctggt tgggtgtcta taagcatcac tgggccacag aggaaggaag
138601 actggagcccc actgcacatc aagggaggaa gaaaagcccc aggaaggaag
138651 tgggggtggt ggagggccag agcctgaaag tacaggaatgc tctaaaaacc
138701 tctagaatct cctgaaatcc tctctctcac tgcacactt cttaccatac
138751 ctctgattac acaagtata catgtggaaa actagtgaat taagaaagag
138801 caacaagaag aagtaaaaaa aatcactgac ataattctcc caaccagaga
138851 taacccctgt gaatatctgy tgtatgtatg tgcagcattt ttttctgtg
138901 cagtcacta ttgtagaaa tattttaaac aaaactgggc ttgcatctgt
138951 tacatgata ttgtaaact acttttctct taacaatatg ttttttaagt
139001 ctgtgagatt ctctctacat tacatgagat gatcgccatt tcaaaaagt
139051 agetatcatc tgcgtaatcc ttgctatgca ctgggcattg tgcataacag

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FIG. 1 CONTD

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139101 ttatatcgaa ttgtattctt ttattcttgac aacggctctg ggagggaagt
139151 acaatttttc cccaatctcc aggtgaagct gagagaagtt aaagcagcat
139201 ccccgaccac taggcgtgtg gtgcagcgtg cgccctccgg gctgtgctgg
139251 gtgcttcggc tagtgactac acgacagtat ggctgccacg ttccgccctc
139301 ccatgtgtgg cagtgaccga ctatttctgt caaatgttct taactactta
139351 tctaaagata ggggcaagga ggggaaaagg ggcttggggg caagctataa
139401 tcacgctttc catctttaaa actgttaagt aaactagtgg atcaaaagaa
139451 tgggaaagcc ttctttccaa agtttttcca gcatittaat gttgccttta
139501 gacagctaaa tgcaaggtgg atgtctggac acttccctag agtaacagaa
139551 cagcttgatt tgaactgaac aattcaagcc tgtaggcagt tttgtaaaag
139601 gaatatagca tagtgattac ctatatctca cggagttttt aaaaagtttt
139651 tcttaaaaaa agctttatta aaattcagac tatalagtgt actcatttaa
139701 agtatacttt ttaatgtttt acagtatttt cacatagtgt tgcaatcatc
139751 accagaatca atttttagaac atttttatca tcccaaaaaa aaaccctata
139801 cccattagca gtgcgccgcc cccctccgac ccccaatgcg tccagctctc
139851 aggcacaact aatctacttt ctgccctag agctttgcgc tattctagac
139901 attcatataa atggactaat aaatacctg gtttctatga ctagctctctt
139951 tcacgtagca caatgttttt aaggtaaatc catgttgtag catgttaaga
140001 atgccacatc ctttttggtg ccaaaattgg attggtgttt gaaagtattc
140051 aatgagtatg tccctataaa gtgttttagca gagtttctgg ccgcagagca
140101 ctgctcatla cagttgtcac ttccctcaac gtgaaatcac tgcagtgcca
140151 catacagcag taatcgcttt ccccaatttt tactgttatg cagatgcaag
140201 ttatttaagt tcatatttaa acccaatagc tcatittaac tattttgggt
140251 aaaaattttt atcttccatc caaagaatga gtataactagt atttctctca
140301 gtaatactgt aaaaagagga attcataact ctaataatct ttatcacagt
140351 caattgtaga aagaatagac tcttgaactc gggagggacc tcaggaactc
140401 agctaattca tcttccactc tcagacacaa cccactggta attcttgcca
140451 aacaagaatt gattcctatt agatcccctg aaaaagtgat tctataacca
140501 tcccaatga cctatccagc tgtctcaaac tcccgttctc agaaaaatgg
140551 ttttatttat agtcaacttc cgacgctatc tgagatagct gctgttgctc
140601 tgcaattatg tattctatga aacatgtgct ctgccctcaa gtaccactgt
140651 taaatttctc tgtcagctct cttttttggt gcataagtggt ttttaactct
140701 ttccacatag gtctttgttt ccaaatagct caatcatctc tgtgctctc
140751 ctctgctgag cctctctgta ttctctatcc cctccctcag gtaagcaact
140801 cagagggaact gtgcagcttc ctttctatgg atccttaagg agaagtcatt
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140901 ttcatccggc tgaattctga ctcgagttga agagaacact ggctttgtgc
140951 atcaggggcc ttcaactcgc tatacattgc tcaacctgga cttttctgct
141001 cttttggcca tcacttctc aatgatitla ttctctccc aggtctgtga
141051 taactgactt ttcaactcgt actcttttag caattatcc tggtttctc
141101 tacaalggac aaatactaca gccattcaga atccttatic ttcccggagg
141151 ccttcagctc catcggaagg tctggcgaal gtgatgagca cacacgctgc
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141251 ggggaagccg ctgcacaaaa catagattcc agacctacac attctcgctt
141301 tctgaatgga atatgccagg aagggaagat ctaaatatat tcaacaagtc
141351 gaatagtctt atttaacatg acgatgctgt tcaaacattt tgcagaaga
141401 atttttttaa aagataactat attactaccg aggactctgt tctgtcccc
141451 atatttgaaa actgaatga gtccctccag gttagcatta ccaagttag
141501 taacacagaaa gagaggtatg cccatataat tctgtttcag atgacaagt
141551 agtaattttt ttaattgttg tatgttcgtg gcagtgctat actttggcca
141601 tctcaaatcc aaattgaatg gggcatcttg tattttatct ggcaatcctt
141651 atctggttca gaggcacaga ggcctctcagt ttcccttctt taagaacata
141701 catattggct ggggtgcggt gctcatgtct gtaatccagc cactttggga
141751 gggcgaagga ggcagatcac tttaggttcag gagtttgaga acaggttggc
141801 caacttggtg aaaccccatc tctactaaaa atacaaaaaa aaaattagcc
141851 aggttggtgt gtgggtgcct gtaatccagc ctacttgagg ggtgaggca
141901 gaagaatcac ttgaacctgg gaggcaagg ttgcagttag ccgagatcac
141951 accactgcac tcaagcctgg gtgacagagc gagactctgt ctcaataaaa

FIG. 1 CONT'D

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142001 aataataata aaaaaataa aataatctt aaaaaagaa catacatatt
142051 aatttactta ctgacacatt aat'taaatat t'taaatagcc actatgtgcc
142101 aaaaaccctt ctagt'tg'ta g'gagatagag cagagaaaga acaaatcgcc
142151 g'gaaaa'tcc tgctcgcaaa cg'cttctac gaatatcaaa g'gtctggcaa
142201 agagggcactt tgccatttcg aatt'taccag cctcagt'tcc ccacata'taa
142251 gtgggggctat gtagaagaaa gaacatggga t'tggaa'gca gaagatggcc
142301 ttgtctgtga gagctcaggc ttgtcactta atctctcaga cagt'ttccct
142351 gccaatgaaa cggacaccac atctgcctga ct'tcagat'g ggggtgagga
142401 tcacatggaa t'tt'tgcagg gaaagt'ttct t'gtacgctac a'aatgt'taa
142451 aatgttacta acattattgt taatgcaatt gct'ttggat' t'ttggaaact
142501 aaactct'tgg gatctacaaa t'ttcata'taa ttgtggaagt t'acataggaa
142551 actagacatg tatcccaaaa t'tacatggaa aagcaactta aatt'tt'tta
142601 tgctaggtaa tat'tc'caaaa cattaagtat aggc'tgcatt t'tcttatat
142651 actactgcaa aaatatt'ttg taaagtagg't aacaacatta taaacattca
142701 gtacaggat' tat'caaacg agc'gtaagt aacatatt'ta tatact'tgtt
142751 t'gtatg'tt gctaaagt'tt gccagaaata cccattgcaa acc'tt'tcat
142801 aaagaa'cat agagt'tgatt g'tt'tatgaa t'tt'taa'ga aagct'tt'tt
142851 aaaaat'gaa aggaga'agt' aggcct'taat tatgact'ttc cacatt'ttct
142901 ccttggc'ttc t'tt'g'taa'tt agtcaaaagg g'taaata'ag atcaaat'gag
142951 gacacgataa agctgaattg t'cgacacatt t'taaagcag t'gggtgagac
143001 att'aagt'cag aagt'tgg'tat act'tt'caat atgctgt'tac aatt'ttaggg
143051 gaaattat'ca t'att'aaact ag'ttcatagc caatt'ct'aa att'cact'tgg
143101 t'ct'caat'gct t'tt'ctcatt ag'tacg'tt'a gatt'tgg'tac accatgacca
143151 ta'gtagt'ttg g't'gtctaga aagt'ggg'tcc ttaggccggg ag't'gt'gctc
143201 cagcctc'ta atcccagcac t'tt'ggggagg t'gaga'cg'gg g'gatcacctg
143251 aggtcgggag t'tt'gagacca gccggg'ccaa cat'ggcaaaa cctcatc'tgt
143301 act'aaaa'ta caaaaatt'ag ct'gggt'gt'gg t'ggca'at'gc ct'g'ta'at'cc
143351 agctactc'gg gaggc'tgaga caggagaatc act'tgaa'cct gggaggt'gga
143401 ggg'tcgg'tg agccgagatc atgccactgc act'ccagcct gggcaacaag
143451 agt'gaa'ttc cat'ctcaaaa ataaat'acat aaataa'taa t'att'aaaaag
143501 tgggt'cct'ta aggaagt'gag taatt'cac'gg t'agt'ccttc act'aaat'tca
143551 tct'gtaatt'tt tgc'ttatt'tt cagt'aagacc acacgga'aac t'att'ct'catt
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143651 tggaa'ta'agc tggggacaga act'tct'tgt t'tgaa'gg'gaa tagctattat
143701 agccaaat'gc taggat'ctga gtgacagact agt'gccat'at t'tggcact'gg
143751 ccatgcct'ga g'ttccagcag ctctgagcga gcaaacgaca cagaccatt'tt
143801 tct'tacacct' tacat'gt'tt ggt'gggaagg g'gcaacagcg cct'tt'gt'ga
143851 tcaagg't'taa caggga'aagg aaagggagaa gat'cat'ctca taat'gtat'cc
143901 ctcaat'ccat att'ggg'gaca t'ct'ctgggag agt'caggacc agagaca'aaa
143951 gt'ctc'tgac ctagt'at'ctt agaatt'acac t'tcagcact' t'catt'tt'gca
144001 agt'gaaaaaa tgc'atcc'agg tggatt'tg'cc caaagt'ggct gct'ggcaact
144051 gagacagaa'c aaagacct'gt ctctc'tgac ct'cact'cgg gct'tt'ccac
144101 cacactat'cc t'gctcaccaa tagtaggaag cagct'gct'ga g'cctatt'agc
144151 aggc'taat'ga gagtcagcca t'taa'caat'cc agcaagaca t'tt'ctcaggac
144201 tgggt'cc'ac att'ct'tt'gca cccact'ggaa ggt'gctc'tgg g'gaaaaaa'ac
144251 ctatt'aa'tta aacgat'gtga aaacaat'cct aggact'tagc t'gt'act't'tt
144301 t'tc'aaataa caaaatatt'tt t'ggc'aagta aacaat'gtag t'tc'act'ctc
144351 agt'gga'gga acatagccgg ggt'acggggc aggccaagt't acacacat'ac
144401 aag'taa'acaa cgggt'caact att'tt'aaat g'tac'tac'cc t'gtccaat'g
144451 t'agg'tgacc caaatt'ctga t'ct'tctcaga g'gat'ggaat' aggt'tatt'tt
144501 t'att'tt'gcaa cccact'gt'tt cct'tctat'at ataact'gctc att'tt'tgac
144551 aaaatt'atat gaagt't'att ct'catt't'aaa g'tt'ct'g'tgg agct'gaat'ga
144601 tatgat'acac agcct'tctac aat'tcct'c'g g'tc'caagg'tt ct'tgagag'gg
144651 cctat'catt'tt tataat'gt'gt aggcatt'tt'c caggcct'aca g'cact'ct'att
144701 t'tt'gt'tt'cat t'ct'tt'tt'tt gaaact't'tt at'gaaat'aa't t'ctaacacat
144751 ggaagagt'ac aagagt'aaca tat'cagact't catatt'ccca ccat'ggc'tc
144801 tat'caaaatc taatat'ct'tt tgc'cact'tt gcctt'cagat t'tt'tt'tt'ta
144851 ataaaa'tatt acagatatag t'tgaaggcta t'tggacactc ct'gtat'gata

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FIG. 1 CONT'D

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144501 tgccttattc tcttccctac tctctctcct gagatgacca ttatcctgaa
144551 ttggcatttt ggcattccca tgcattttgc aattttgttt gtttttttga
145001 gacagagtct cgcctcagtc cccagcgtcg agtgcagtgg cacaatatcg
145051 gcttactgca acctctgctt cccaggttca agtgacaatc ctgccctatg
145101 ccaactgagta tctgggacta caggcatgca ccaccacacc tggctaattt
145151 ttgtgttttt agtagggact ggggttttgc atgttgagca ggcgtgtctc
145201 aaactcctgg cctcaagtga tccacccttc ccgccctccc agagttcttg
145251 gattacggcg atgagccacc atgcccggtt tccatgcatg tttttggact
145301 ctaactgcat atatatgaat ccaacttagt tgttcttttg catgttttca
145351 aactttaaat aaatgacata tttaaatatt tggctattcc actcaacaaa
145401 atgttttctaa gattagycaa agcgaatccac ataactctat ttattttaac
145451 ccattattatt gtgctattgt atttgtgtag cacaatttat ttcccagtc
145501 tcccaactggt gcccalglat ggcctttccc attttaaaca atgttgcaat
145551 aaacatctttt gcacagtaag tccctattta aggtggataa ctctctagaa
145601 attgtaacct taagcaaaac aacagataag gcaaacattt ttcccatcaa
145651 atttacaaca aaacatggtt attcgaggac ttgcgttaat gtacatggtt
145701 ttgtttaaag tctgtttcca agcaccctac aacgacttta agagaggttt
145751 tactgtacat aaccccttat gcacacatcc agagagtgtc ctaagaaact
145801 gcttagaata ggatttcaga gttgaagggt atccacagct tcaagagttt
145851 attttgctaa actgtctccc aaagtgtatta cccaatttta cacagtgatt
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145951 ttctcgccaa tatgaagaac ataaagtgtt atctcaatga taatttaagt
146001 gccatttcca caattacaag taagaagaac acttatttat tggccaattc
146051 ggtttctcca cctgtaaact accaactgtt acctttttacc aatttttctg
146101 ttatttgtct ttttcttaaa gacttgcacg ttatatatgt cacattctat
146151 cctgtctttt cagtttatga tttctttttt gaacagaaat ttaaaatttt
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146251 cataccagc cataatagag gccaaaggcag gaggatcact tgagcccagc
146301 agtttgagac cagcctaggt aaaacagcga gacctcatca ctgcaaaata
146351 taaaaaataga attagttggg catggtaaag gcaggcctac aatccagctc
146401 actcaggagg ctgaggcagg agaactgctt gaggccgaga ggtcagggct
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146551 ttttaaaggaa attcttctca cccaattatt atatagacag cctcttattt
146601 tctcttctaa aagttaaaaa aaattgcttt tctagtgcag atctttatct
146651 agaacttatt tctgtgtata ctgcagggtta agatttctta cacagacaa
146701 ccattatcca agaaacattt attgaattat taaccttttc ttactgggtt
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146851 aatacaatgc tgttttcaat tactctaaat ccaatacaag tcttaatac
146901 tggtagagaa gattacttcc ttctcaaaa ttgccataga taactctagg
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147301 gtggctgaaa gatcaactaa aatgtctcta ctittcaag caacaattac
147351 ctataaaact gccatgcctc ccatttatgg acttacaat tctatcacta
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147651 acttagaagt tccaggggct aaactgtaat cttagtcag acagaccga
147701 cttggagacc cagctgcata attccagaga taacctcaag gtggtagtc
147751 aacaaccagc ccatgttga gacgatgcca gctgtcttc cactcggact
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FIG. 1 CONT'D

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147801 gggacccaag acagctacca gaacaagaaa tacagacact gtactcagca
147851 taattttttac atgccttcca tatcatgttt tctcttttta aaaccttggc
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148151 ataaaaaact tagctggggc aggtgggcag gtcttatagt cccagctact
148201 tagaaggctg aggtgggaga attgcttgag cctaggaaatt tgaggctgca
148251 gtaagccatg atcacaccac tgcactctag cctgggcaac agagcgcagc
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148351 atattttattt tttttattat tataaattta ttatttattt ttatttattt
148401 agaaaaaaga accaaaaaaa tctggaactc tctgaatgct tatttccact
148451 ctagggtatct atcagaagat aagaacttta aatattaaaa aaattagctg
148501 gatgcataaa atgcacattg tagcattact tagagtagga aaaaatgaaa
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148601 caatgataca ctatgatgtt gagaataata ctggtctcaa aaactattta
148651 tagcaataat gaaaatggtt acttatggtt tagcattaag taataaaaatt
148701 aggatatacag ttgttggatc actlgtgaata cagctgtaga aaaaactctg
148751 gaattgtgtgc actgaaaaat aaaatgtact aaactattta caatagttag
148801 gctgggaata cagaattaca aatagaattc tcccacctac tccacctgtc
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150251 tcagaaaaaa aattgacccc aaactctgat caaatttagt aagtgcagca
150301 agtttgtatt aaaaagcaca gcaaaacatt ttttggtagc aaattgtag
150351 ttccccaaat acagcattac cctaaaaaca aataaaaaat cccaagtaa
150401 gaatagttga agaccctcta gcaacatggc tgaatgtatt gttgctcat
150451 cttagaaact ttttgttctc accataattc tggagaacag aattatagcc
150501 ccttggctgc tgtagcaatt cctaaagctt cagcagccag ggggctgaaa
150551 cactactgaa tataacttta tatagaagat atgtttagtt ttcaattgtc
150601 ctatttactg gactttttct gaaggctca ggggagtaac acatcatlac
150651 atggttacag aatctctgga tgggaagaaa agccacatc aaactgaggg

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FIG. 1 CONT'D

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150701 ccaactgtct atcaaaggag tcccagatgt gtgcaagcat ctggctgccca
 150751 gtaaacacc accctgcctg tgatgtatct ttgtgtatt taecatgaaa
 150801 gaagtataca acctgaggtt attttaatgc atgaaaaataa cgtttgtcata
 150851 acctgaaaaa aggatgacc cctgtggatg ttggctggtc actagttaatt
 150901 ctcatacaca tggaaatgca accacgtagt caaactgtta ttctgcaacc
 150951 tccctcatct ttctgcagct tctaacgtta acctaaccacc ttctggaaac
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 151051 ctccaatggc tcccttgccct ttgacctac ttatgcagca attttccaag
 151101 ctgtataactt ggaatctgcta tcttttatct cccaacagtc tcatctatac
 151151 ccatgggttc aactgtaaca tctaggaaga tgtctcccaa atctacattt
 151201 ctagtctccg cttcttttcc aaactctaga cccacatttc ttctttttt
 151251 tctttttttt tttttttttt ttgagacag agtgtcactc tgtgccccaag
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 151351 gttcatgcc tctcccgc tcaagctccc gagtatctga gactacagcc
 151401 acctgccacc atgcccggct aattttttag tatttttagt agagacgggg
 151451 ttccaccatg ttatgccagg tggctctgat ctctgaacct ggtgatccat
 151501 ccgctcggc cttctcaaat gctgggatta caggtgtgag ccaccacacc
 151551 cggcctctag accacattt ctaactgcc actgggcagt cgcacttgaa
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 151901 tccgatccat tctgcacatt ttgtcaaaaga aatcttccaa aaatcagtat
 151951 ttgttaccaa tcccaattag attagaagtg gaacgaataa acaagcaaat
 152001 tctagattc ccatagattt agaaaaaagt aactcattaa gatcgccgtc
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 152101 ctctctccat ctcccccact ctctgtctc tgtggcttta ctcccccagc
 152151 tccaaaatct tgagaaacac ttccactct ctctgcctg ttcaaacctg
 152201 gccatctctc tcagaaccag ctccagacatc gctctcggga aagcctttcc
 152251 tcttctctac agttgaactt gctttgcctt gtagtgca ga ttattttgtg
 152301 accctgttta aagaataagc tccataaggg cgtgtttcaa atccctctac
 152351 aacctaaactg tgtgatgtgc atgggtattg ttggggaaat aaaaagtccta
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 152851 caaaaataat caaatactga atagacatat atatatcata tacactcatg
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 153001 taggtcactt caatttttat taccctggga tacctacata taaattctat
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 153101 ttgtgttaatt tcaacactaa atcttttagc catlaaagt taactattt
 153151 taattattaac aatgacaaaa tgcctgcatc cagaataata caaagcacta
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 153301 agtggaaata agttttttat aaacctaaagt gtttaatga aattgaccag
 153351 agcccacaaa attcccagtt ttccaccaag ctcttttga attataatc
 153401 ttcttgtctg taattaaatt ccaggcctct gcagaagata aggaaaaaat
 153451 tccaaagctc tgtcacatga tggaaaggaa ttctctgtt aattattttt
 153501 tattgacccc aggaatttag cagtgcagga aaatttagaa tatgattaat
 153551 aaaaggcagc aggttagaac tactttggaa tcagaaaaa gcctagtact

FIG. 1 CONTD

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153601 taagacagtt tattacttac aaagttgcta tataataatc taacctctct
153651 tgtttctcgc aattatgaaa catctatgta aaaagtatta cagaatccat
153701 ttatacagaa acacagttgt gtcaaaatag aatatactgc taccacagat
153751 ctaattacca aaaggaaaaa ccaaaatgct atcagtgagc ctccagaaat
153801 gtttttctga caaaaaaaat attttggcaa aaacaatatt taatgagctc
153851 tatgtttata tatgagctta ttccacagtc gtctaccttt ttgtttgctt
153901 gaacagagtg atgcacaaac attttggcaa catctcttcc tataatctaa
153951 cattaaaaaa aaccaactct ccagtaacca tttaataact ttctgcatc
154001 ttaggtaatt tatctgcatt ttgtcaggca ttttttccca gtgtcctatc
154051 aattcttggt ttaccatgc tataaatcag atatccatga gatgcctaac
154101 tghtaaagatt ttaggaggaa tagcagccaa atggatgtc tgggtgaatt
154151 aatgaaaaac aggaagaatg cctcgtgaat aggcctaaggc atctgcacaa
154201 aagtaggaaa tacaacagc ttcttctc caaatttgg tcaatcacct
154251 tagttcacat aaatctctcg attttgatcc agtatctgat agactcccat
154301 tgaaaaaaag gaaggatttg gagaatttat gagcaactc ctatatgctg
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154651 tctcgtgata agtttctaca caaagggaaa actcaataaa aagtgctgga
154701 tggctggctg aaaaatggcc tccccattaa caccagtgga gggtaaaat
154751 ataaaggaaa ccaggtcatg gctgatgcag gatcgtgggc aaagtacatt
154801 gacaaaaaaa gtgatacaaa acagattgac ttattgtctc tagtttaaaa
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155001 atcatatgag ttgctgcaat aaaaacagtc agtttatca tctgctgaaa
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155251 ttaatagggtg cataacctca agtagcagat gtaacttgg ttcacacac
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155401 tctagctgct ctggcgacac cacacacaca cacacacaca cacacacaca
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155751 ctagctgcac ogtcttttaa tctcttgcca gattctgttt cagtgtaact
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155951 actggattaa gaaaatgtgg cacatataca ccatggaata ctatgcagcg
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156051 aatcatcatt ctcagtaaac tatcgcaaga acaaaaaac aaacaccgca
156101 tattctcact catagttggg aattgaacaa tgagatcac tggaacaggg
156151 aaggggaaca tcaactctg gggactgttg tggggtgggg ggagggggta
156201 gggatagcat tgggagat atccaatgct agatgacgag ttagtgggtg
156251 cagtgaaca gcatggcacg tgtatacata tgaactaac ctgcacaaat
156301 tgcacatgta cctcaaaact taaagtataa taataaaaaga aaaaaaaact
156351 gtaaaaaaga aaagcaaaat ttcgatatg cgtatcatga gtcttctgac
156401 atatctgttt gttagaggtg atttttaaaa aacatttctc ttctaactct
156451 tagggaatga ccatgtttca tatttcagaa tctctcccg taaatcatg

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FIG. 1 CONT'D

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156501 tgaacatgct atgttaaagt gtggaagtat ttaaagcaac ctgcaggaaa
156551 acactgactg tcgtgaatgc tcagggaagt ggaacctggtg atgaaatata
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156651 ttccataaaa acagaagacc catacaattt caactatata aacataaattt
156701 gatagtaaaa agctatttta tactcaaaaa tacagatatt aagaatttat
156751 caattgctgt gcttaaaact tagagggaag gttaatttt tgcattttac
156801 atgtcttttt tttttttttt tttttttttt agatggagtt ccgctctgtg
156851 tgcccaggct ggagtaacct ggcacgatct tggctcactg caacctccac
156901 ctcccagggt caagcgattc tctcgctca gccctccgag tagctgagat
156951 tacaggagcc caccaccacg cccagctaat tttgtattt ttagtagaga
157001 tggggttttg ccatgttggc caggctgttc tcgaactcct gacctcaggt
157051 gatccgccca ctccggcctc ccaaagtgtc gggattacag gcgtaaagcca
157101 agatgcctgg cctcagcaga aatatctaa attttactta tcatgtactt
157151 atattgttac ttccaaaagc aggcaggagc acttacatta ttttgctata
157201 aaatacagtc alaacaataa atatagtaa tacttctcaa gttatttaaa
157251 aaaaggatat ttaatttttt ctgtgtttac tcatatacta atagaccctg
157301 catttgctaa tgaagatata acttacgggg acactgactt aaagaaattt
157351 gatattacct ttaaagactg tctcttagta acataattct cagactgaag
157401 caatttctca tagtcttcaa aaatctaatg aaaagaaaa acacattaga
157451 gtgtaaaagc agcagtgagt tctccgtatt aggcggctt gctttctttt
157501 tcaggaggcaa attcccaact tctggccatt ttacctctct tctttacagt
157551 tgaagacact gggggacagg gaggccaaga attacaagag acatccttcc
157601 ctattttatt ttagttctgc aaattagata aaaactgagt aattttgagt
157651 ccttccaata aatcattttg acttaaaact ctagtaaaag ttgcaagagt
157701 actcatttta tgccatttta aagaaatctt tatgtaagta gcccttgctg
157751 tggctatggg tccacaattt gggaaaatat taaatacact taaggcttca
157801 ctgggcaagc cataaagaat cagactgttc aatctactgc ataaacagat
157851 aaagaacgag gcaacctttg ttgcatgacg gcccaactag tctctctgga
157901 gcacttcaact ctacaccgaa gctggggaca ctggtgcacg aagctctctt
157951 tcttaacatg gtcaccaacc atggcctagc ccttcagttt aacaagagt
158001 gctggcatct ggggaggttc agcattcact tccatcaggt gtggggcacac
158051 agctcataga gcactgaagt gggaggaagt agcgagacca ggacggagga
158101 caagagatca ggaactgaag agggtgacaa actcctagcc ctccggagagt
158151 caagtgcgag gggagagtgt gtcccgctgt gtaa'tgaggg caagctgtgc
158201 atgctgacaa tcaccgatag agaataaagt gaaaagttaa aatacaagg
158251 tgtagctcac attaaaatca cagtaattat actctttaat atgaatgact
158301 tatttttctt atcctgaaac acaaggagaa ttttgtggat cattaaatgc
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158501 agctgaaga gtctgaagg tttgaagggg catgagttct cagagctcgc
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158601 aagaagtgat atatgtagt aaaaacaaaa ttaggtaaaa aaggagctca
158651 agagaatgaa ttatttagtc tctcaaaact tcatgtatta tacttgaaca
158701 caaagcatta ctgcacaaca cattttacct attcatctca taggaaaaaa
158751 tagtaattag ttgataattg agatttatcc acgtatcttt agccttttaa
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159251 tattagagcc tgggggaagt agggaggagg gaagatgaag agagactggg
159301 taacaggtat aaaaatcacg ttagaagaaa taagtctag tattcaacag
159351 cacagtaggg tgactatagt taataattta ctgtatattt caaataagct

FIG. 1 CONT'D

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159401 agaagagaag atttggaaag ttcccaacac aaagaacga taaattttg
159451 aggtgacggg catctcgatt accctgatgt gatcgtttaca aattgtatgc
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159651 acttttgtatt ttataattat attgctaatt cctaactcta aattgaaaga
159701 caactggcaa aataaaaatt tatatttatt taataataaa gagaagttag
159751 taaattttg ttatttgaat gtgtgaagat atactattga taggcagagt
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162151 ttatgataga aataatttaa ctggtgaac aatggaaact tgagatgagt
162201 taattttttt ttttttttt ttgagatggag tctcactatg tcaccaagcg
162251 tggagtgcag tggcatgac tcagctcact gcaagctctg cctccggggt

FIG. 1 CONT'D

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163351 atagaaaccc catgagcagt aatagaattt ttctgagctg aaccagggca
163401 gagggaaccc cctctatggg ctgcagcaga catctggagt tgctgacccc
163451 atggggagtct tctacctgct tcaactatcg cagccctttg aaagtggaga
163501 ctgggtttccc cacactgcag gccacggcga cacagcccca gtggcaacaa
163551 aaagagcagg ttgcagatca gtgctgcttt gaagggtgtg gtcatacatt
163601 agtgtttacc caaagaaaaa gggatcagga gggagtttag ttaaaacca
163651 cactttcaaa ttccaaaggca agaaaaacct gaacagctt gaaaatccag
163701 tattaggaat ccaataatag gtggggtaga attcctccag catatatata
163751 tatgctagat atatatata tatatatata tatatatata tatatatata
163801 tatatatcat atcatggata cagccaataa acaatgcaca cattccctct
163851 ctcccgccca catttccact ccagtgtgta atgggattga tacatggata
163901 taccctcaaa tttagtgata taataaatgt atatacaaac cacatatata
163951 tacacacagg cttagtgata cataatacat agacaaatat aattgctgca
164001 ttatagatca cataactgag tgaaaaaaaa aaaaagaaac ccaaaaaaaa
164051 acagctagga tctcacccaa gaaggaaaag acagaaaatt gtgaaggaaa
164101 ataaagtcca aactccaaag aatttagaat ttaaaaacct taattcaaat
164151 agtgtactct ttcatcctac ctctcaaaa ttctgttttg agagacctaa
164201 gttttgcata gtatatattg ctgaaaatct tgatatctat atttttaagt
164251 aataactgctt gagagaaact tgggttagag tgagagagac acttaattgc
164301 agggacataa aagctgagg agccagcgac agctgcggtt tagagggctg
164351 actgtgctgg ggaagtgaac gagcactttg caaatcgggt ttctgatctt
164401 cacaagtccg tgaaaaaagg atgattttct tcatttcaga tgtggaana
164451 aaaaactcaa ggttaactaa attgctcaag gacatccagc ttatcaggtg
164501 gcagagaaaag acagaattca aaccacttct attatggaaa tttagaggg
164551 gagggatgaa agagattatg gtgttatgga atcctttttg ggaanaagct
164601 ttgtgtagac aaatctatgc caaaaataaa aactaacaa gttaaatat
164651 taataactaa actgagcaac agtcccttta agagctcaaa accaaaaaga
164701 ttaggagggtt ataaaaaaac caaaaccaat gccaaaatca agtcaatcat
164751 ccaaccaaac aaaaaccttt gaaccagact actttaaaaa aaaaagtgtat
164801 ttatgggtcat tgttatacta tattaacctat aagcatttgg taaaataaag
164851 aaaaattggtg ttccaaaac tgacagcata ctagaanaact tttttgat
164901 atttagattt taaaggattg acttaattc aatggaaaat tggcttaaat
164951 acaaatcaaa acaccattta tttttgtcat tcaattatgt tgcgtgaaat
165001 taaattgggc tgaatatatg acagcaagaa attactatca agtacaactt
165051 attctataca atgttttaaa acctttgggg aaattttcag aaatcatat
165101 taagtatttg ctttccctct ctattggcgt ttgttctatg ttgttaatta
165151 tgtgaagctt taactttttt taaaaataga atttactgtt ttccatgaca

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FIG. 1 CONT'D

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165201 gcgaagagcc atctgatagg aaaggggaaa aaaatgggac tgtatgtctt
 165251 attattagca aacacctctt tagtagttta gacacagaca ttlttgtaga
 165301 aagaaatgga atcatccttt glatttlaat tcattcttca ttttggatgc
 165351 aaccgagacc tatctcacca ctagctcttag atccaccttt tgaggggaac
 165401 atctctagcc gctgtacaat ttttgtcttc cggggtgaga aacagccact
 165451 cctgggattt ccaacactcg gagcccgagg ccatgctgcc ctaccgccct
 165501 ctcccttcac ccaagcagta cttccaggag tctgttccca agcccttccc
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 165651 tcccttcttt ccttccctct tcttttcttt gcccttttct gtctaccagg
 165701 acctccctcg tgggctcctc cttcttctcc tgttttcttc agggagacca
 165751 taggacgctg gcaggctgaa tggaggcctg tggacacccg agcaggctgc
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 165851 ttttgctgga ggccttgggg aaatgatggc attgcggttc ctttctctcg
 165901 atgtctcggg caattcagtg cttgtccgaa acccgacac ccctcgtgct
 165951 acgacacaaa aagtgccaca gtggccgggc gcagtactc acactgttaa
 166001 tctggcactc ttgcaggggc caaggcaggc ggaatgcttg aggtcaggag
 166051 tctgagacca gcctggccaa catggcaaaa cccctctctt actaaaaatg
 166101 caaaaaatag ccgagcatgg tggatagcgc ccgtggctccc agctacctgg
 166151 gaggctgagg tgggaggatc acctgagcct gggaggctga ggcctgcaatg
 166201 agctgagalt gcaccactgc actccagcct aggtgagggg gtgagacctt
 166251 gtctcaaaaa gtgctgcagt taactgggct taccctgtct ctaggcagct
 166301 gttaaacaaa agctgctgtt gcttaagcct gccctggaat ccacccccag
 166351 cccaccccaa gtggcttcca aattattcca tcaattctca acagtattct
 166401 cctccagagc ttcttgtcaa ttaatttttc ctttgcatcc tgtatttcca
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 166551 aatctctctg acggccagcc ctgcaggctc cgctccagg gagaccacgc
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 166651 ttctgcccac ctgacacttc ctacccttta ccaactctct acactctctc
 166701 acacttttgt tccacatgtg acctaatata ccttcaaca gatttatggc
 166751 accttctcag aacagctgg gtaactctct agtctgcaga taataggtag
 166801 ttttcagcag agcaaacacc tgctttcccc ttlttccacc tctggagagc
 166851 tatttaaaag aactatttac catctaagtc ataggcaact ttcaatcact
 166901 gttcataaag taatagcatt ggagtatgta ttaattatag tatatggact
 166951 atatcgatat tattgaaata catatttaag gtaatatata aaaaataaaa
 167001 attcatacat ggattacaat taagtaaaac ttgtaaaaaa aagttacata
 167051 cgtatatcct gaaaaaagta taaatttaatt tggagttatg taaatagaac
 167101 aattaatttg ctaaaatgct tttgaagaaa tgaattcgaa tacatatata
 167151 tatatatata tatataact tatataagtc ttaactact tttaaacctg
 167201 aaaacctatt tttttcaag atgctgttac attgtcagtc tatagtattt
 167251 ttltgaattcc tcttctcaaa cagcttcaga gctgattctg tagacattga
 167301 agaaaaatcat actctattta ttctatttta tctctaaaa ttagttttct
 167351 tataattatt atccctcccc aaataattct agctaacttg atcacccact
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 167601 ttgatgactc aagtttttgt atgtttgtct gcaaattagc tgcactcttt
 167651 tctgatatat tctctgaaca tttttttgat gataaaatac agaaaacaaa
 167701 agtaaaaatga ttgtcagggg ctggaggagg gaggaatagg ggagtatta
 167751 tttaataagt atagaggtag agtttgaatt ttccaaaata aaaaagtctt
 167801 ggtagtltgt tgcctaacaa tltgaatata ttgcactcta cgatttctca
 167851 catagtgaac aagtagataa tacatgatca aactatagat gattatgaaa
 167901 caacgacaa ataatttctt actattttgt ttaccactgt ggacatttaa
 167951 aaatttctatt cataaaaata catgatgtcc ttcatattca aagatgtaat
 168001 tctccacttc ccttcaactc catgttcttt tcccagaat taatcactgt
 168051 tctgttttcc tatgcatcct tgcagaggta ttcagtgcat atgtacctta

FIG. 1 CONT'D

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168101 agtgggaagct tatgcccttt aatctgtttt taacataaat gacagcatgc
168151 cacacacaga gcactacata ttccctttccc acgtaactgt atatactgga
168201 attcactcca tttagacttg tgacaaatat tttagattgt ttctctgcaa
168251 taggacagac tggcctcata gactgcattc taittacaga ttctcttata
168301 gatccacatc atacactggt ggctacactg aggcctaaga agtaaaattt
168351 ctgtcttttt aaaaattaaat tgccctttcca ggggtcaagt gactataaatt
168401 tgacctagct gagttggaaa aaaaaaatta ccttgaaagt agcaaaagca
168451 tctgaagcaa tatcaaatgt tgacaactcc acgtacttaa agaaattctct
168501 gaattgatta gaaaagagga tgattttggc aagtgtgtca tgtcgaatc
168551 attctctcag cataatccca caacgtaaag caatctgtgg ggcttccaat
168601 ctaaaagcga aacaagagag aatatagaaa ctctgttatt ctattaaatt
168651 aatattaatg gcatcaaaag aaccatttca atactgctat taatggaaagc
168701 atacatacca ttgtccacga ttcatccaat atccactgaa gatctactat
168751 gtgcctggca ctattgcaga cgtattctgg aatttgagtg tattctgaaa
168801 cacttagata tactcaata tgaaacttgt gacagctggg ggtgggggga
168851 tgaggcgaaa tgtaaaacat gaaaagataa ttccatacac tgaaaggggc
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168951 tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgagtg actacttaag
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169151 gtgtgaaatg aggcaggggt ggagagaagg gcagggggcca gatccagat
169201 cagatcacgc ttgtgcagcc aaggtaaagca gtgtgtttaa tttaaagctt
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169451 tactgttcgg aggaagaagtc aacaagactt gctgatgatg tagctggagt
169501 tgggtgaggg aataaatttg gaaactgaga attcacgaat gatctctatg
169551 tttttggcct gaactcactg gtagatgggt gtgctattta ttaagatgaa
169601 taaactagta gaggaacaag tttagtaaga aattaagagt ttgtggttga
169651 ccacattagt tttagatgg ctgatattca agtagaaaag tctccttgcc
169701 agtatgatac acttatctgg acttttagaa aaagataggga gagacctata
169751 taaatatatg atttgcatgc agtaggtggc taatacatag ctgtggactg
169801 attgactcac ttaaatccca agtggaaatca tggctcacag caaaaattat
169851 gctagacaaa cgaaaactct actgtgggaa acaattcagg actggcatcc
169901 cagattgggtt ccaatttcaa tacaacaaca atctctcaaa gtcaaatcca
169951 gtctctaagt aagtttaaga tatattccag tgtgtgataa gatttcaaga
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170051 cagttgacaa ttgtgtggta aaatataggaa gaatagaaca aagaagaata
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170151 aaaaaactg gtggggcgtg actgctcact cotgtactcc cagcactttg
170201 ggaggctgag gtgattggac tgcttatgct caggagttcg agaccagcct
170251 gggcaacatg gctgacttta caaaaaataa aaaaaataaa aatttagctg
170301 agaccctgac tttaaaaaaa ctaaaaaaat tagctggaca tgggtggaca
170351 cgctgtagt cccagctact caggaggctg aggtgggaga ttgcttgacc
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170551 ttactcatca actactagta acaacatttg ttgaacaata agtatgtac
170601 tactctttat aagattatag aattttcatg aaagacagat tcaagaataa
170651 agattcaatt gaggaatatg actacttccc aatatcaaat ttacaaatat
170701 tagtagaaga aacagcaaac aaagatacca ggtgtgattt tattcaattt
170751 tgtcctgttt atgcagaatg atattcacaa atattgagta ttccctgaat
170801 aactcatagt aacatttaaa gctgatacat tcagatagtc atgattcttt
170851 gtagaataata aggaatggcca atttatagtg ctacgaattt ctcttattag
170901 aaaaacctga aactcagcct attggctcac aaggacagat tgcagggtgg
170951 ggttttatta aagatgtgtt aaagaggggt atatgtctctg aaatgtaaag

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FIG. 1 CONT'D

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171001 gagaaaagca ctgtcattta ttgatagagt actcaagaga gtataaaaa
171051 aaggctgtttg gccatagagaa agaattctaa ggaaggacaa ttaaaatcca
171101 gaactattga tcagcaagat atatgtggat tttgttaatt tggccctaac
171151 cttaactttt cagtttcac tcacctcaca tctgttaatt cccgtggagcc
171201 cctcattccc tcaattggaa tgcctctctt acattcccac aactcagatg
171251 ctctcatctc ctcaaggctt agtccaaatg ccactccctc cttagaagct
171301 ttccatacca ctacaactga ggaattatct ttctgcctct cacactcaaa
171351 taacagcttg tctgtaatt ctctttaaca cttttttcat tctgtattat
171401 gttatactgc agtaaaattgc taataggtcta tttcttcat tacaatcaat
171451 ttaattgttg gggatattgt ttacttatcc tgttaacctc tctctctctc
171501 cccatccccc atctccattt ggtgtctatg tcatttatgt ctactttctc
171551 ctgtccctac cccagctccc gaagagtgcc tattataatg tttttcacga
171601 agcatgcata taatgaattt aatgaacctc aaactgaaga aatgtcttaa
171651 tactagagta ctctaagtga agtcaaaact tgacgtatac aaaaatagca
171701 tcatctctgg ccaaacattt ctctttctt aattcaattt ccaaaactaa
171751 accatctata aaaaagttcc actctaaact ttgggtataa ttagtttctt
171801 ttttcttttc atttctgtaa gcttattgaa accatctgtg atgcactgac
171851 agtttattct tgagaatcaa aagaatgttt ttaaaaaacc aagactcttc
171901 tgggtgcagca caottgtcat tctatccagc cagtttgaca ctgtctatc
171951 tgagattaca acctcttaaa ttcagaaata catagggata tacagagata
172001 tatagggaat tctaattctc ctacgtactc ttttaagtgat ttataattca
172051 catagatcat ttctacctga ctacctctca gtaattgac ttttgatgg
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172151 ttccaactcc cactaacatt aatatcctta ggtctgttaa agaattcaata
172201 tgtatccacc cttaactatt ctactcatag ataagctccc tgatggcaag
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172351 aatcttatct tccctcttga ttgttaattt agatcatata gtctggaact
172401 taatgaactg tgtcagttgt gagaaggcac tatctaggca tgcccatcaa
172451 ataatgacag cataatgaaa agtctctctc aaatttaagt aaagccaaaa
172501 tgtaagagca atggtctcag ctggcagtgta gctacagtaa tcatcacaca
172551 gaaaatggtc agaagaatga tcttgtgcaa gaattattca atttaagaac
172601 aaagattaca ttatgtaagg gggaaaaatga cttttgtgat tattgtctga
172651 agtaaaccaag gccaggaaat acctggaaag cttttgtaaa atgccattca
172701 acaaacactt ggcctcctca atatagtcaa gaacgtatgt ttctaattca
172751 gaacatttgc ctgaactaaa ataatgagtt aggccaggca tagtggtctca
172801 tgcataaat cccagcactt tgggaggcca aggcaggagg attgcttgag
172851 cccaggagtt tgaaccagc ctgggcaaca tagtgggacc ctgtttctac
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173701 aaaaggaatg acagaattca aaattacctt ttgtcacct ctagcaaaat
173751 gcggaatca ggcgaatttc atcaatggat ggtaaaacaa ttaagtttaa
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173851 tgcctcagtc tagcat tact aaaaatcat ctctaatgt gatgaaatat

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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173901 gaactacata gcaccatcta caaaataact gccaaaaatga aactgcttaa
173951 aattttttat aataaactta aaaaaacagg ataattggga gaaattttat
174001 attttaacat cagcctcttg gaacatagtc cactggccac agttctttat
174051 ggatcaactga gagctgttca gtgacctcat tctcaagttc tctcagtaac
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175251 ctttttctgt tctacatttc taaaaatgtt tagtttttaa ataataacca
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175351 ctcttcatct tcaagtatct cattaaagtt ctgatgataa tctcttcccc
175401 agactcttcc aagctggaat ctacgctccc caccocaagc tattttctat
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176501 tgcgcatcact gtactccagc ctggacaata gagcaagacg ctgtctcaaa
176551 aaaaagaaag aaagaaaaga aaaaagagac aaagaactgc tattttatga
176601 tatatctgat tttaaacta tgtattattt tgatacaatt aaattattaa
176651 aatgtacaag agagaaaatg aacacaggtg agatggacta ggtatgaac
176701 agcagaattg aaaaacggaa tacaataaaa taagagagac tctgtgtttc
176751 agatggtgga gtagaagac aaggggagga agaagatggt ctgctgtcct

FIG. 1 CONT'D

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176801 caagctttgc tacacctaga tctccagtct ttatgatcca gaggtagcctc
176851 caaatgccca agaaacattt ataaataagt atacataaaa ataataatca
176901 gggattctat caccacacct gacttcagtt ttatggcttc cctatagacc
176951 catatacatt caacctggca gatgctagct actggaaaaa ctctcatacc
177001 tgtatttcat tcccagaac cagaatata atgtgtgtgc ttatgtgcgt
177051 ggtgaggcca tcaatctca tgcacgagc aaaagggtaa gtgggcagct
177101 aggaataggg cagataggga agcataagca atactgtaat aggaagagac
177151 agaaatagca gaaatgtgga ggaagggaag gcagttaaat gaaacataac
177201 atttagaacc attlaaggtc aaagaaagga ttltgctgca gtaatcatag
177251 agacagatct ggagggtcga cctcacacat gacaaatacc ttactgcag
177301 ttccaaaagg gaactcatca tatctcaaat gagactaatg ctatgcactt
177351 ttaacaacta ttaaaaacct agccctactt gaaagggaag catgtacctc
177401 ccccttgagg agcataaaca ggaatagagg atgagcacta atatactcca
177451 cagtaggact ccgagtgccct atctgtcttc tcaagatggt gttaaatatc
177501 tgggtcacat ctttttttcc ctgttaagaa aacaaacaga aattaaattg
177551 tacactctaa atggatgaat tgtatagtat gtggaatata tacatatata
177601 tatacacaca gacagaaatg gtacctctct ttctaatacg caaaaaaacg
177651 ttaacttaact ctctccatag ccccttaaca agctgtgctt gcaaacacag
177701 tctcaaaaat ggatcgagct acttgccaca ggaatgtgtc tgggggaaat
177751 ttgaccaacg agaaatccat ttcccacaga gcagtgaagg acataaagtgt
177801 aatatgacag aactgaaattc ttgtttttt cactgtctac ctttatgcaa
177851 gaaaaaaatt atgattatca tttttaaacc ttcatgaata aggaaggaaa
177901 acagaaagaag aaaaataagt tttagtaaaa tgtaggttag aaccaaatct
177951 ctttttctta gatctacttt ctagtatttt ttgctttcac gttatcactt
178001 tattcactgt tcttccacct agtgctctga cttaaaaaat aaagtgggtt
178051 ttccatlagc tggaaaatatt tgaatcaggt gatcataaca aatcacatct
178101 agcctagagg aacagaaag atcacogaat cagttagaca gaggaaacag
178151 atatgcaatc atggataggg cttcttagag tccatctgga caagacctgc
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178251 tggactggac ctgagtttac tatatgaaa ataagtacaa gaatgactga
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178351 ctataatccc tatgtgtgga gggcaggacc tgggtcgagg tgattggatc
178401 atgggggtgg ttccctcat gctgttctca tgaatgtgaa tcagtttcca
178451 caagatctga tgggtctata tgggactctt tccccttggc tcattcactc
178501 ttcccttccc tgcgtccatg tgaaggtctg tgccgtgctc cccctccgcc
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178601 attaaacccc tttccctttt aaattactca gtctcaagta ttctcttata
178651 gcagtgtag aacatactaa tacaatgaca ttgcaattct aatcagtagt
178701 gccctagtct tggccctcat ctctcaacta aactatgaaa gagcttgctt
178751 cagttactgt ctccacttca aagcatctct accctgcaga gtgagctagc
178801 tgaagaatgca aatatgacca tgcctactct ctcccttaac acttcaacgt
178851 ctcccctttg cttagaaaaa agtccaatac aaaaaggcca ggcgcaagtgg
178901 ctcaagcctg taatcccaag actttgggag gcccaagtgg gcagatcaag
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179201 aaggaaagag agagagagag acagaaaaaa agagagagaa agagaagaag
179251 aagaaagaaa gaaagaagaa aagagagaaa gtccaatacc ctccaatgac
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179451 ctgtcaattct ttaagatcca gtccaggagt ttctccctct gggatgagtg
179501 cccctctctg tactacaacc atgtcctttg ccacatcgat cagtaccttc
179551 tcttcccaac tactcttaac tccacttcca cagcagcaaa tacttactga
179601 gtgcctactc tgtgccaggg acttatgcta agagctttac aggtattatc
179651 caattttcac aacaacctta tttttttaa ttcatatttc tttttgtat

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FIG. 1 CONTD

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179701 ttttttctg gcatgcatac aaccacctta taatatacat attataaaaa
179751 agaaaataag gatgtataat atatgtttta taaaatgtac aaatgtaaat
179801 atgtatatat acatatattata aataaggaaa ttaaggatta ttgagattgc
179851 ctatagatctca ctgtcctgtc agatactgat aaatatctac aagcactaac
179901 accatccaag aaaaacatgac ctcaacaact gaactaataa agacaccagc
179951 gaccaatcctt gggacaatat agatatatga cctttcagac agagaattca
180001 aaatcactat tttaggaaaa atcaaaagaaa ttcaaaataa cacagagaaa
180051 gaattcagaa ttctatcata aatttaatac agattgaaat aatataaaat
180101 aatcaggtag aaattctaga gttgaaatg caattgacat gctgaagaat
180151 gcatcagagc ctcttaacag aactgatcaa gtagaagaaa gaattagtga
180201 gcttgacagc aggcctatttg aaaacatgca gttagaggag acaaaagaaa
180251 aaagaataaa aaacaatgaa gaatgcctac gagatctagg aaatagtcta
180301 gaaggggcaa atctaaagact tactgacctt aaagaggagg tagaaaaaga
180351 gataggggta gaaaacttac tctaagagat aatatccgag aacttcccaa
180401 acctagagaa agatatgaaat attcaagtat aagaaggtta tagaaccaca
180451 agcagattta aaccaaagaa gactacttca aagcatttaa taatcaaaact
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180551 aataacatcac aatggagctg caatatatct ggccagcagc ttgtcagtg
180601 aaaccttaca gggcaggaga gattggcatg acatatttaa tttgctgaag
180651 gaaacaatac ttttacccta gtatatctgg caaaaataacc cttcaggcat
180701 gaaggagaat taagagcttt cccagacaaa caaaagctga gggatttgat
180751 caatactaga cccatctcac aagaatgtct aagggtagtt ctccaactgc
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180851 ccaactgaaa cagggaagcac atagaaaagc acagaaatgt atataactgt
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181101 attaagttgt catcaattta aaacaatggg ctaataagatg gtatacgcac
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181201 aaaaacaaga aattaaagca tagtgccaga gaaaatcaca ttcatataaa
181251 ggaagataga aagggaagaga agaagggaaga gatgactaaa aaacaaccag
181301 aaaaacaata acaaaatggc aggagtaagc ccccaacttg caataataac
181351 attgtatgta aatggactaa agtctgcaat caaaagacat aaagtggcta
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181851 gatattgaaa gcaaatatta tttagcttaa agtgagagac acatcccaat
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181951 actcaacata atattggaaag tcttagctag agcaatcaaa caagagaatg
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182101 ttcaacatata tattggaagt cttgcccaga gcaatcaaac aagagaatga
182151 aatgaagggc atccaaattg gtagggaaga agtcaaatata tcttgtgttg
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182251 ctattagaat tgatgaacaa attcaataaa gttgcaggat acaaaaatca
182301 acatacaaaa atcagtagca ttcttatatg ctaacagtga acaactgtga
182351 gaagaaatca aaaaagaagt cccatttata atagcaacaa ataaaattaa
182401 atacctagaa attaacctta ccaagaagtg aaaaaaatct ccaataalgaa
182451 aactataaaa aaatggatga aagaaattaa aaaggacatg caaaaagaga
182501 aagatatccc gtgtccatgg attgaaagaa acaatttgtt taaaatgttc
182551 atactacca acgtaatcta caggttcaat gcaatcccta tcaaaaatacc

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FIG. 1 CONT'D

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182601 aatgacattc ttctatcgaaa tagaaaaaac catcctaaaa ttacatgga
182651 accacaaaaa acccagaata gcaaaaacca tcatgagcaa aaagaacaaa
182701 actgaagaaa tccatgact tgcatttgaa ttatactaca gactatata
182751 gtaacaaaaa cagcatgata ctggcataaa aatagacaca cagaccaatg
182801 gaacagaaac aagaatccag aaacaaactc acacacctac agtgaaactca
182851 ttttttacaa aggtgctgag aacatacatt gagggggaaa gacagtctct
182901 aacaaatagt gcagagaaaa ctgaaatccc acatgcagaa gaatgaaatt
182951 agacccttat ctctgtgcac atacagaaat caaatcaaaa tggattaaag
183001 acttatactc aagatctatg aaactatgaa gctactaaaa gaaaattattg
183051 gggaaactct ccaggacatt ggtctggcca gaaactctt gagcaaaacc
183101 ccacaagcac aggcaatcaa agcaaaaatg gacaaatggg accacatcaa
183151 attgaaagtc ttctgcacag tgaagggtac aatcaacaaa gtgaagagaa
183201 aacctacaga acacaggcct tctatgaaaa ggtgctcaac atcactgatt
183251 atcagagaaa tgcaaatcaa aactacaacg agatattctc tcacgacagt
183301 taaaatgcct ttcatgtaaa cgtcaggtaa caactattgc tggtaggagt
183351 gtggggaaaa gaaacccctc atatgctgtt ggtaggaatg taaattagta
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183501 ggaatatcagt atatcaaga gatactcata ctcccatata ttgtgcagta
183551 ttgttcacaa tagccaagat ttggaaacaa cctaaatgtc caaaaacaga
183601 tgagaaaatg cggataaaga aaatgtggtt cctatacac aataaagtac
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183701 gaactggagg ccattatggt aagtgaaata aaccaggcat agaagagaca
183751 acatcagatg ttctcagtta ttgtggygat ctaaaaatta aaacaagtga
183801 actcatgaaa atcaagaata gaagcatggt taccegaggg taggaagggt
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184001 tgtactaaaa tatctcatac acactacctt ctatgtacc acaaaaatta
184051 aaaaagaaaa aagagaaaaa agaaataaat aaaaaccat gctctcaaga
184101 ggtcaggagt ttgagaccag catggccaag atggtgaaac cccgtctcta
184151 ctaaaaatac aaaaattagc taggcttggt ggcacgcaac tataatccca
184201 gctactcagg aggtcaggcg aggggaatcg ctccaacca ggaggcagag
184251 gctgcagtga gctgacatcg tgccattgca ctccagcctg ggcaacaaga
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184601 agctgagaca caagaattgc ttgagccctg gaatgagctg agattgtgcc
184651 actgaattcc agcctgggca acagaccaag atctgcctc aaacaacaaa
184701 gcaattctat tagaaaaatg ataaaggctt ggggtgggtg gctcatgctt
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185251 gaatcttcaa tttaaaagaa tactcaaaa tcagttgtctc tcataatttt
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185351 ttctagacct ttgagaggcc aagcctggag cctcagttga acccaggagt
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185451 caaaaattag ctgggtgtag tggcacatgc ctatagtctc agctatttgg
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FIG. 1 CONT'D

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185501 gaggcttatg tgggaggatc acttgagcct agaaggtgta ggtggaaggt
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 185651 tatttatact gatgttaaag actataattg ctgtataaaa aaagatatag
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 185851 aagaacatct catacagcat tccagtagaa atgaagctct cgagaactct
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 186151 aaccttaact atttcaaaac cagttttttg caaccgccag gctgccagat
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 186251 aaaaatata ttgataataa agaagcaaca tccagaaatg gcccaaaatg
 186301 ccaaaaatta gctggcaatt ctaaggttac atacaattga accaataaga
 186351 tcccaaacct gaagaagccc ttgtgtttgc tggcaaatc aaaaagtca
 186401 gctttaacat gaaatgctcc ataattattt gctgaatgaa tgaattata
 186451 atatggaagt attaaactca atcaaatag aaagagagaa agggaggaag
 186501 aaagaggtgg tgaacagcag tcacagcaac cagaatgatt gctgaaaaag
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 186801 taaatcaca atgagatatt acaaacctct attagaatgg ctaaaaaat
 186851 aaaaacaaac aaaaagttga catctcccaa cagccctact cctaggtatt
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 188201 gccctctttt ggtcagatat ccaactgcag atcatctcag ttgtgtgtgt
 188251 ccagggtgtc atatcaccca aaatggttgt tccataggt accatgtgag
 188301 tggagaagga gggagcatc ccagaaaag agaggagtg ggcagacaca
 188351 acactttata cacagcacia gcagtcttca tcttatgca gattacattc

FIG. 1 CONT'D

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188401 cttaaaaatgt cttggtacgat caaactaatg gtcactgtct taattttatt
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189751 caggcaatac attttccctc ctttgatctc ttatcaogtt gtgtttcaaa
189801 acatcaaaaa gtctaaagct gtgtcttgaa tagtgaccaa acctcaaaaa
189851 acacagctga gtttgatctc gagcccataa aaatcagag ccttgcaaac
189901 tcagccacaa atcatttttt gaacctcata atagtgtgct gaaatggttc
189951 tttctgtct gcaatttttaa ggcttaaaq attagataaa aatttatagc
190001 tacataatga gatttttatt taacccaaag gccgacctcc taactagcca
190051 ttattcaact gatgatagcc ggaacctcca gtattgtccc taccocagtg
190101 ggccacttct ctctagattc ctgacagaga agtaggtttg tcaaaagattc
190151 ctgagtcagt cctgcccact cagtttaagt cagtgcctgc agccaccact
190201 actgctgtca gctcagggtt ccaaacacct gctcccagcg ccttcaacc
190251 cccattcatt gccttgttct ctgcaactgc ttatttttct agcaactcagt
190301 ttactccaag tgtagaaaac caccctctct tcaactcaact tgttttttct
190351 tgttgttttt gtttttgttt tgtttggaga tggagctcgc ctctgtcgcg
190401 cagtctggag ttcaagtgtg caatctcggc tcaactcaag ctccgcctcc
190451 tgggttcaag ccattctcct gcctcagcct cctccagag tagctgggac
190501 tacaggcgcc gcgccacag ccggcgtaat ttttatattt ttatagatga
190551 tgaggtttca ccgttgtagc taggtgtgtc tggatctctt gacctgtga
190601 tccgcgcgcc tcggcctccc aaagtgtgct gattacaggc atgagccact
190651 gcgcggcct caacatgtat tattagtaca aagtcctttt acaaaggttg
190701 aaggtgaaca aaggataatc acagcacagt gcagaaacac cttcaagctg
190751 aagttcacag atcatcttta tgaaaggttc ctgactcttc ctgatcatct
190801 ttctccatga acatcttctt ttgtcatggt ttctggatag cttctctccc
190851 ctctctccaa accotttctc ttctctctat ttctactccc tatcaacctt
190901 ggccaaaagag ggcattttct aaatttctgt tacttttctc tgccaaaggaa
190951 atcaagctt ttttcttcca gtcttttctc tacagacatt gcctagagac
191001 ttcagccttt caaacataca aaaaagccaa tcaaggtatc ttctaaacaa
191051 aaattcaact tttttctctg taaggaaatg gccattctcc tagggtatct
191101 ggcaaaagct gtagtccatc cttaaaaata taatttttcc tttctgttat
191151 caaaacatac cagaaatttt acagtcacaa gactgttctg ctatccaaag
191201 aagccacagg agaggttatt cacgtactga aatcatataa tcatcaccoc
191251 aaagagtttg aattatcttc taacaattt actgattctc tcagaaaaat

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FIG. 1 CONTD

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191301 ggctcactgt tatgtcccaa tacctctctt tgggtccaatt cttttaccctc
191351 tgcttttgata tctcattctc attactacat tcaitccaac aattcacaaa
191401 ttaacatgcc actaggtgtg gcaaacacag tctctgtact caaggttaaca
191451 cagaagtggc tgtcccagtg caagccatga accaaagagac atggggggtag
191501 ggggtctctg tcgctggagtg aagctctgaag tcagaagagaa tttttacaa
191551 ctgtcagtag cttaacataga taccittaggc ttgagaaggaa gagtgtgctgc
191601 ctgcaggctg atcatccatg cctccagtttc atagagataa catagtcata
191651 ttctataagt aggcataata tgctaggaaat gctggctgcc tcccttcctga
191701 aaatactgta tgtagtggga atgcttaaaa tggaaactgta ctaaaactttc
191751 actccttttc attcattcat ttattcattc aaccaggaaag tatataatttt
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191901 aagaattgcc tatcttatta tcacaataac aaatcctcat aatagttttg
191951 aatcatcagt ttaaaaacgt attatatcta gtattttatt ctggaggggaa
192001 ggcaagtata taatacattt ttttttaaaa attaaagtaa tccacaagag
192051 taatcaattt aactctgcgt ttgaaggctt aatcttcagc tatatggaaa
192101 attcaaatgt tcagaaaagt actcttttc tccaaggatt ccagagaata
192151 aaagtttact tgataaaaaa atctcttttc attttagcaa attaaattgc
192201 ttaatttccaa aataattttt aaatgaactt ctctccaaaa tttttaatttt
192251 atattttgatg tgcccacataa aagaaggggga acttgcaata cgttttctta
192301 cattccacttt ttgttatctg agccaattgcc aaagaagaatt ataaaggcac
192351 caaagttttt ctttggtata ctctcccta actccccaat ctttggaagg
192401 cactttgaaac ctatgaggtt ctgtggctgc tcaaaagcttc tacaggtcac
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192651 ctactataag aatagggaat catttttcta ttatgggtca ctgaccaact
192701 aaatctaaaa aaaatcaagg gttatacaaa aaacaaaacca gcttacactt
192751 aactttagtt cctgagtttg agaaaaagag gaaatgaaaa aataactacta
192801 cttgacattt gtatacagtt tgcatttata tttagtgctc ctatataaca
192851 caacatatat atgtatatat ttttatttag tttaattatt aaacaagtgc
192901 agtaagttcg tattattcct attttataga tgagaaaact taagctcaaa
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193151 gatggagacc taagatggag agggagagta agcaagcmaa gcaagaggaa
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194051 taataaaatg actagacata ttcaacctt acatttctaa gcttttgttt
194101 tagtttagta gtttattatt taggtataat aggtataatt gccttcaaaa
194151 ggagataagt atattactag cacttaacac atttcttaaa tcaattggat
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FIG. 1 CONT'D

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194201 aatatgttca taaaagaac tgtctgaatt tgaagctctg aagtaagtga
194251 gtgactttgg gcaaatctac taatatcttt gaactttagg ttcttcatct
194301 ataacatggg gctaataata cagttattaa cacaaaggta gttttaagaa
194351 ttcaacagagt tgaatgcttg aaactgtacc tggcatatag caagcaltca
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194451 tagctgcata aaacttaact atagtttggc tttttgcttt tgtaaaaaat
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194801 tagacacttc ttctgaagcc tagtgaccaa aacgtatgct aacggttaaa
194851 agaataaaaa tggttaggcc ataaacaaac aaacaaataa tccaaaaaac
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194951 aacaacaaaa aacagtggag ggaatcacca tgtttgggtg gacctagttt
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197001 aagttagacat gggagacttt tctgtgacct taccaccaac cctgtgctct
197051 ctgccttggg atcctgttga tctgtgacct taccaccaac cctgtgctct

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FIG. 1 CONT'D

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197101 ctgaacatgt tgcgtgtgcc actcagggtt aaatggatta agggcggtgc
197151 aagatgtgct ttgttaaaac gatgcttgaa ggcagcgtgc tcgttaagag
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197301 tatctgtcta ccttccctcc actattgtcc catgacctgg ccaaatcccc
197351 ctctgtgaga aacacccaag aattatcaat aaaaaataa atttaaaaaa
197401 aaaaaaaac aaaaaaaca aacacgaag cactgccttt ttattttgg
197451 aaatatatt aagtattata aaatttatt atataaaaca gctctttggt
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197601 ctcactgcaa gctccgcctc ccagggttcat gtcattctcc tgccctcagcc
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198101 cttaaaaaaa actcactata ttttaagaa tactaggcaa atccatagaa
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198201 aagtaatgac tactaatgac tccagggttt cttttggagg tgatgaaat
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199851 atacttgcaa aaaagccatt tttcttctat ttggggcaag atttggctca
199901 atattacaaa gtgtactaga attagaataa gctattttca caccctgtg
199951 aqaattcaat attgtatcat ttactggaat aqaaggatac tatgaactcg

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FIG. 1 CONT'D

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200151 cactgtaaca gaaactatca gtcaactctt aaaaataaac tttttaacctt
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200851 aaacttttcc tgcataagaa acataaggat tataccaaga ataattttag
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201501 ataaaaacaa aacaaaagca aaacaaaatg gaaaacaata tqtataaactt
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201701 caataaagtt tgctacgttg actcttctct tcatggaaga ttctctata
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FIG. 1 CONT'D

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202901 cacttttatg tctcggagat ggctcttttc tttaaacctc atggagcaat
202951 ctctttttagc ttcagacttt tcttctgcat ctctcttacc tctctcagcc
203001 ttcacagaaac tgaagaagaac tggggacttg ctctggacta ggctaagggg
203051 aatgtgtgtc tggtttgatc tctctaccaa accactgaaa ctgtcttcgt
203101 attaacaatt agctgttttg ttttcttatt atttgtgttt tcactggagt
203151 agcacttttc attttcttca aqaacttttc ctttgcattc acagcttggc
203201 taacttactg atgcaaaagc actagctttc agcctacctc cgctctggat
203251 ctgccttcct cactaagact aatcattttt ccactctttg atttaaagtg
203301 agagatatgt gactcttcct ttctcttgaa cacgtagagg ccacttatag
203351 ggttatgagc cagcctaatt tcagatttgt tgtatcttag ggaacaggga
203401 ggcttgagga aagtgagaca ggggaacggc cagctgagtg ggcactcaga
203451 acacatgcaa catttatcga ttatgggcac agtctgtgtg gtcccaaaac
203501 aattacaata gtttaacatca gagatcactg atcacagatc accacaacat
203551 atgtactaac aatgaaaaag ttgaaatat tgtgagaatt acaaaaatgt
203601 atcaagagat acaaaagtga cacatgctgg tgaaaaaaat ggcaccaata
203651 gacttctcca atgcagggtt gccataaacc ttcaattttt caaaaaacacg
203701 gtgtcttcaa agcacacaac aggtgaaaac caataaaaaa cgttatgcct
203751 gtaattgtctg tctttctccc tctagttcta taqcataaag gaaaagat
203801 ataactgtag gaattttaaa tactccctga catcaaaaaa gagtacaaat
203851 tataacatgg tatcatagat atgatattgat ttttgtcca ttattacttt
203901 gcttggttct cactgttaaca agctaagtgc aatttactta aattaaaaac
203951 gttttcaggg ttccatgttc aatctggtag taagcatttt ctgattcact
204001 atctcccttt ttcatctgat ggtgggtttg tctcatttat cattgaataa
204051 ataactcag taattactga qcacaggcac ttgtctaaat actagggata
204101 gagccacaaa caagaaaaac acaatccctg ttctttgaaq cctattatta
204151 agtggaaaaa gcaaaccttt tagggcaatg gggttatata atggggaaat
204201 aacacacagt atactgcctc aatacaatct cctttaaaaa ttactttcat
204251 attttactat acctacttat tgttaataag tattttaaca
204301 atgtttttaa atttcatctt atcattattc ttctattttg ggatccatat
204351 ttgaaaggaa atcaaaagtc atgtctttaa actatgcttg agttccagca
204401 cccagacccc ctgcaaatta aggcagaact ctctgccttc tcccagttct
204451 tctcagacca tggccaagcc cactccattc ccagactaaa cactccccc
204501 actccagac taacaaacct ccccactccc agactaaaaa cctcccccac
204551 tccaagacta aacacctctc ccatcacctg gaaacttgag gctgcctttc
204601 tcacactctg ggcgaccatg ctggtcacta tatatacatc tactccaact
204651 acatcattta gccactggt ggtcatttaa gcaatgaagc aagtagcact
204701 caaaccttct acacaaacac aagcacagta aactccctct agttgattgt
204751 aactgatctg ctgtatgatt caaaagagtg taatcacccc ctctcagttg
204801 tcactgttct tatctgtaaa acgaagttgt tcttaaagta agattgagca
204851 tcagggtctc aggttattca ccactgtccc accccattc tgagctttta
204901 acccccagta tctctatcatg ataaagataa agccaaaaat aaagtgtcta
204951 agctgggaac aaaaggaatg gagaggcctg acaatggtgc ctgtggggga
205001 taaggtggca ggaagatgat ttttccataa agtctacctc agagttttta
205051 gaacatacat tctgtttcag caaagcaggc agtggggaca ggaagaagcg
205101 catgttagtc cagaaggctg acactagata aatgcctcct aggcattgaa
205151 aacggtgttg agaccgcga catcaacgtg cctcgcgat taatgctgac
205201 agcaggccat gcagcacaga aatgttagtg gactgacaat ggccctgtta
205251 tacttttctt ctccagcag tcagtaagca gaataaacaa caaatagggt
205301 gtttatlatt attaaaggaa caaatgaaa gaaaataaat gccctgcaga
205351 ctggggcaag aagagttgct tctgaaatta attctctata aagctagac
205401 agatataaat ttaagaaagc aagaaaaagc gacaaaaagc tctttagac
205451 aaaaaaaga gctagccaag gtaaaagact gaaaatacac acatatatgc
205501 acatataaat acacacatgc ccaagatgca gactgggaat cccaactgc
205551 atagacgaga ataaacatgc agaaaatggg tctggggcaa ctccaagta
205601 caaaattagt tagtgtcat gtattcattc gaaaagtatt tactgagcac
205651 ttataatgta ctaggcactg aacaaggaaa tacgaacaaa agaagcctca
205701 aagggtcac gatgtagtga gagacacaga cacgtcaaaa atttccacg
205751 aaggcgagaa aaggtcgaaa aaactaaaat gatgaagaaa agatatagag

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FIG. 1 CONTD

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205801 tgtgtatgga tacatatctt tatatctata taggtatatt atagcgatat
205851 gaagaaaatg gagtgtttac ccttaacaaa caggtgttac aacaatggag
205901 gggggaggat aggaagccaa aanaacgaaa gccattaaaa ctggaacaga
205951 atcaaaagata taacagcgta aacagaaaaa caatctaaac ttgatcttcc
260001 gaacgatttt tctagtgtgag attcatgata agaccaaca ttcagttctc
26051 tgcagctttt aaaaataaca ttctcttctc agatcacatt ccaacaaaat
26101 gaccttaaaa aaacaaacga aagcataaaa atcaggttgg ttttagactt
26151 ccatgaacca aatgccccaa ggccatggag aaaacctaga gtctctgataa
26201 gtaaatgcta taacaccata attaaatcct tagccaatat accattlaig
26251 tgtgaacaga tagtgtatat ttactaaaaa tggaaacaaa agatgagatg
26301 gaatgaggcc caacaagagc tcaacaaaaa taatgctaaa aaatcagaaa
26351 tagttcttga aaaggagcct gtatatgttt gccagaaacat gtggggagggt
26401 gagaatctac aattataact cattcatata ggaataaaaa taataaagga
26451 ttcaactaaa gaagtttaaa aggaactgc cccaaaaatc tccaagaaaa
26501 gatggatgga aataagtata gaagttagaa taactcaatc agagaagtta
26551 aagaaaaagga aaaaaacctc tggtagctat ttggtccggg ttctcttctg
26601 tgatagatgt gtctgcccta cttccacagt cactccacc caacaaaagc
26651 gggggaacct gaccaggtt ttgccacagt attccctgtc ctggatgcag
26701 caactagcta gtaaatagat ttggacatag ccaatcaaaa taataaagaa
26751 gaaagaaaaa tgttgtagag aatgctgaga aaaggaaact ctgttacatt
26801 gttggtggga aggtgaatta gaacagccac tataaagaaac ggtgtggatg
26851 atatgccaaa aataaaaatg gaactaccac atgatccagt aatcccaatt
26901 ctgggtatat atccaaaagga actgaataca gtatgtcaag gaataatctc
26951 cacttccgta ttcatgtcaa ccttatttac aatagccaaag acatggaacc
27001 aacctaaagt tccatcaaaa gataaataga taataaatgt agtcaggct
27051 ggggtcgggt gctcagtcct cttcatataa caacttggga ggccaagatg
27101 ggtggatcac ttgagtcag gagttcgaga ccagcatggc caacatgggg
27151 aaaccccgtc tccacaaaaa atacaaaaat tagctgggtg tgggtggcag
27201 cactataact ccacagtaac caagaggctg aggcatagaga atcgtctgaa
27251 cccagggggc agaggtttca gtgagccaa agtgcacact gcactccagc
27301 ctgggtgaca aaacaaagat ctgtctcaaa aacaaaaaaca ctgctttaaa
27351 atagattcaa agcagagaca aaagagaaaa tggctatatc ttcatctgat
27401 atagccaaat tgctttctca agtttttatt ccaagttata ctttcaagc
27451 tgtgtagtgt gagtgtcagt tatcaccat ccttcttaac atttggacct
27501 gtcaagaattt aaaaatttgc ccatgtgac agctgtaaaa ggttgcacca
27551 ttatggttgg agtgcagttg tgtaataacc gctgtgcga gcttgcact
27601 gttgggttca agcaattctc ccacctcagc ctcccaagta gctgggacca
27651 caggcatgtg ccaccatgtc cggttaattt ttgtattttt agtagagcgc
27701 ggttttgcca tgttaccagg gctggcctcg aactcctggc taattttaat
27751 tttagttaga gacatggtct ctgtatgttg cccagcgtgg tctcaaacctc
27801 ctgagtttaa atgatcctct cacttggcc tcccaaaagt ttggggttat
27851 aggtgtgagc caccacacct gaccatact agctttttaa ctttcttatt
27901 ctgtacattt cctaattcta tacttggccc atttcatatt taataaaaaa
27951 tttagagaca agttcttgct ctgtcaccta gctgtgagtg cagtggcagt
28001 cacagtttac tgcagctcgc aactcctgac cttaaagtat cctcccaact
28051 cagccttaaa aagtctcagg ataataggcg tgagccactg tgcccaagta
28101 ctttgcacag ttctttaagg tggctgaaga aagtcattat agctgccaat
28151 accaactagt acagtccttc gctaataaat ataaatcacg tgcaagaatc
28201 atgaggtgtt tgatgaaat caagaatatat aaagaaaaat gtaaaaaata
28251 atagagcaaa cctcgggggg gatggttaaaa attattttat atttatataa
28301 ccaaaaagata tactatgcta tcacatccat aaaataagaa caggctgcta
28351 tgaaaaaaga gtaaaccaat aatgagaaaa catctcttga actaagaaca
28401 tqcaatgcaa tagaatagtc gatgttgata agggatataga attgaaaaac
28451 aaatccacaa tttaaaagac aagccatgga aatctggaat gaagagtataa
28501 atacaaagaa aagcaaaaga ctaattcaca gaaaagtggg aaatatacag
28551 ggttagagctg gagagccaat attgattgaa tataaatgct taagagaaaa
28601 gaaaaaaaac gataactgat gagagagtaa caaatcacct aacaataata
28651 aaggaaagcaa aattctctga gctgaacatg tcttcagatt taagttaact

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FIG. 1 CONT'D

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208701 aatggttatt acacagaggg aatgcacaaa ggccatttcc aagatacact
208751 gtgaatttcc tgaactctaa agcgaattcc cacaacttcc cataaagggg
208801 aaaaattctag agtggcaccct aagaaccaga ctgtcagagt ggaatcagga
208851 ttagttaactt cacaccaaat gagacgaaggc agtgaacac acgtttacata
208901 gtttctaggg aaaaagattt ttccactaga attctatact ttaccaatta
208951 tqcagatgtg agggcacaact aaatttacct aaggacaaag atggtgaaag
209001 agtagggggg agagagaagg aqatggaggg gaacacgaaa aatgagaaaa
209051 cagttgaaaa gtaagcagtt gagcagaagg accaataaaa tacatggcta
209101 aatctaagta aaggttgata atgtgtctgt gatgcttaat atgactgcta
209151 aaaatgtatt cctgaagtat ttgtatagag gcaaaatglt ttltaaaaaa
209201 tccaaccatc tggaaaaata caactaaaat tctttlatag accttgttca
209251 aggaaaagga tagaataaat gattaaatca taataaaatt tatatgggtt
209301 tgtcatgcc aactaattta agtctctggg ttctctataa tcacatcata
209351 cacaattaa gataaacctg ttctctgaat tgtttattaa acatttaaatg
209401 atgaattata gaataatgga agtaggatgc aaccaccaga agggggaaaa
209451 caggaaacaa aataatttga ccaaatcagc aaaaatcagg aatgaaaagg
209501 aaagtataaa caaatagtaa acagagaata taanaacata tagaaggaaat
209551 aagaagcaacc aataattaca atacatacaa atgtgttaaa ttctactact
209601 aaaaaaccaa gacttcaaa ctctcaaat tgggttcacac acacacacac
209651 acacacacat ttctgtctca aattctgcac gagccataat agaaacaaaa
209701 cgacacaaaa atgttcagaa taaaaggatg cataaataa tatcaagca
209751 tattacaaca tgaataaag aaatgcagag ttcatgagaa attatacaca
209801 cacacacaca aagcatttaa tatatgtatt tagttgtcat gaagagata
209851 tatagaggtt attatactac atatacagt tatgtaaatg acataaatcat
209901 acatataaa ccaattacc ttgcaaat tt aactatttt catatgtata
209951 ttaggtagaa taaaggctat attaaatagt tttaatttgg tgaccttaat
210001 atgtcttagg tagaaccaag aagtcattgc ttgnaaggaa acagaggaac
210051 aggcgggtgt tcacgcctgt aatccacgca ctctgggag ccgaggttgg
210101 cagatcacaa ggtcaggagt ttgagaccag cctggccaac atggtgaaac
210151 cccatctcta ctaaaaatac aaaaaaaat tagctgggca tgggtgtgca
210201 tqccagcaat cccagctact caggaggctg aggcaggaga atcactggaa
210251 tccggggagg agaggttgca gtgagccgag attgtaccac tgtacttcca
210301 gcctgggcga cagagcaaga ctctgtctca aaaaaacaa aaacaaaaca
210351 aaacaaaaaa cagaggagtc ttgtaggaa agagataaaa gatagctact
210401 gacagaatat gaaacaggag ctactgggaa agtgatctac attattttca
210451 gtttaaatat gttcaataca gaccctaagt aaattctgg ccaataaaaa
210501 tcaaaagctg tgtttacaaa acaaaatacc aaatcaggtt tttaataata
210551 gaaaattgat gaatataata atttatata aatagcaaa taanaattat
210601 ctcaagtcca tctgaaaaag ttatctaata aaattaaaac caagagagat
210651 acaaatctta gctcaattta caaaaaaagt gttaatggag gcatacttac
210701 taaaaggagg tataaaacaa aggtcatcac aatcacgcta tcataccat
210751 atgttgtgat caatgcacta aaatataaaa cataaataaa tgcataaaaa
210801 tttygggaag atgtgacaaa attgtaata acagacaata tgattatata
210851 cctaaaaata tgaacaactg aaattagtag aaattaggtt aagtagtcaa
210901 atacatgata aatatacata cagctttcac atataagaaa ttgcacgcta
210951 gaaaacataa tgaaaagcat attttgatca tactgccac taatatgtta
211001 caaaattcat accagatctg tattttaaaa aactacaaaa ccttaatttc
211051 gaaaatagga taattactt tctgtaata gaaaactaac aaataaaca
211101 gagaaataga agatgtactt atagatgtat gtgtctattl atctattcat
211151 cccctcagct agccatcctt ttaattctat agtcacagaa tgattctaga
211201 atgtggctta gctaacttta atgacattat ctaaaattatg agatttgtga
211251 tggtttaact ttctctatgt aggtattttt ctgcattatt tataatgagc
211301 acatttcttt ttctgaaat aataaagaga ctgtggagaa aacctacata
211351 attaagatag gaaagatttg aggttataaa aaacactcta tttgttctt
211401 gaatagacag aataaatatt atttaaatgt cagttattct taagttccac
211451 agtttgatca agttccaatc aaatgtccaa aaaaattttt ttggtatcta
211501 aattttagca aqaatactaa ataaagcaaga ataacaaatt ttaaaaagga
211551 aaattaggag gaaatgaaat gaaaagtgtt ataaagtact gtaacacagt

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FIG. 1 CONT'D

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211601 aatagcacaa gaaacaaca catcaatgaa caacacagct cagatataga
211651 tgttaataa agtgacttct aaatttctgg atgtgaaata gttttctgaa
211701 ttttataagt gataaaataa altttcaaga aaaagaccaa caaatcaaaa
211751 ttaatacgaa tatgccacaa acacaaaaat ttgaatttct atagataaat
211801 aataaaaaaa attataggca aacaacaaac taggaattct tgtgataga
211851 atctgaagaa tggagggcta atatcattac aaaagatctc ttaagacaa
211901 ttaagaaaat cattaaagaa acatacagat aagtgaanaa cataaatgag
211951 gaattacagt taatgaacat attagtaaat gtttaaccat tctctataat
212001 aaaaaaaaat gcaaaactcaa agtgaagac tattttgcct attatgttac
212051 taagtttttt gtgtttttga caaaactcaat tctattgatg gtatttttgc
212101 acaggctctc atttcttact ggtgcagata taaattagac aataatttga
212151 caaatatgaa tctagaacct taaaatgttc acaacctctg gctttatagt
212201 aatttccatt ctggtaatct gtcctaggaa aataaactaa aataaaggat
212251 tatctttaca tgcataaatg tttactgcac ttttttatca taaaaaactg
212301 agaaatatct aatctaacag agggaaataa ttaaatgtgt atataccag
212351 ttgatggaac attagcatat gtcacagatt ttttaacttt ttaacttttt
212401 tacaattatt ttacatttta acattttcaa agcttaggtg tgtcttaca
212451 ttgttggtag cttaacttaa caggcagatt cttttctttc tcggttgtae
212501 ataaagtgac catatgtctt aaaccacgcy acttattaaa ttgatgaaa
212551 tatgtctagg aaaaattttc caaagaatgt gaaatagaat ggaattgtta
212601 atgttataaa caacatccca aattcacagag cataactaca actatgttaa
212651 gcaaaaaaaa acacaaacac acaaaaccta tgtatagaaa aaataatttt
212701 gaaatgttaa cggttgattg ctcctagtaa tgtagtgtgc ttgtggattg
212751 ttaatttctc tttttcttca aatgttctgt ttttccgaa gcttgtataa
212801 tagatcatgc aaatgctttt atagtgaana tgtctctctt aaatggtatt
212851 ttgaatgaat aaacaaataa cttttttttt ttaagttaaa actgtggaa
212901 atctgattgt catgtctttt ctttcttttt tttttttttc tgagacgag
212951 tctcactcta ttgcttaggc tggagtgcac tggcatgac tcggctcaat
213001 gcaacctccg cccccgggt tcaagcgatt ctectgctc agcctccoga
213051 gtactgtgga ttaacggcac tcaccaccac gttcggctat tttgtattt
213101 tagtagagac agggttttac catgttggcc aggtcgtctc ggaactcctg
213151 accttgtgat ctgcttgcct cagcctctca aagtctctgg attacaggca
213201 tgagccacca cgcttggcct gtcattgtct ttcacaaatg atttacaa
213251 tgaatttctt ggctataaag ttctataaag agtagtactt ggctcagatt
213301 ctggagagaa agccaaaaaa gatcatccaa ctctgctccc agggaaacta
213351 caccctgtag attttgtagt agattttggc agcattctct ttctaatatc
213401 acagtaaaat atttcatatt cctaacttgt gtgtgagcac cattgaagat
213451 gqcccaaaat caaccacca attgagtcac ctgaatatgt tcagtgacat
213501 aaatggaaa gtaggttggc agggggcagg ggggtaggag aggcactagg
213551 ggaagagggg aatagccact tggagcatta aatgcctgtg ttgttatccc
213601 acttaaaata tttcaagggg aaaaatgtct aatatctaat ctctaactatc
213651 gctattcaat aataatttga ggccagggtgc ggtagctcac acctgtaatc
213701 ctaacacttt gggagggtcaa ggctgcagtg agccatgttt gtgcccactg
213751 actccagcct ggccaacaca gtgagactct gtctcaaaa aaaaaactta
213801 aaaaaataac attttgaatg tcaaaagttt cccaggaaaa ctgaaggag
213851 tgggaaattt atactgaag ccaaaaagaa gtctcaaca ttccagagg
213901 tataacaaa ctgctaactc attttaaga agacaactaa aaaaatgacc
213951 ttcttttctc cacataagtt taltttcaaa taaatgaatg gttagacagg
214001 aacatttcaa aatgatltc taaagacttt gtaattttaa cttaaggcac
214051 aggcacctltc tgttaactaa aaaaaataa aataaaacta ccaccacata
214101 aaaaaaaatt tccgggccag cgcgttggcc tcaacctggy aatccagca
214151 ctltcggggg ctgaagtggt tggatcacat gaggtcagga gattgagacc
214201 agcctagcca acatgggtgaa acctgctctc tactaaaaa caaaaatag
214251 cgggtgtggt tggcaggcgc ctgtaatccc agctactcag gagggtgagg
214301 caggagaatc acttgaaccc agaaggcgga ggttgcagtg agccaagatc
214351 gcaccactgc actccagcct ggggtatata gcgagattcc atctcaaaaa
214401 aacaaaaaaa aaattcagaa aggttcaggg atgctatttc ttacctgtta
214451 ttccaaatag gattcacaga tagaagaaa tgaatcaag tgtacatggc

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FIG. 1 CONT'D

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214501 aaaaaattgt gacctgaaga ttcatTTTTt aaaaataaat gggatggagg
214551 ttacatgagt acatcacatg gtcaatacta attgaacctat tctcctaaaa
214601 tgggtgcatt tgatttatatg aaaaacttaa aacaaaaaag tgacctttaa
214651 agttctactg tatttgctac tgatccaag aagactctcc cccaaaaaac
214701 ataatttaga attgacctca cagagatggt taagtacaa agcatatcat
214751 tatatatgta ataataccat atcatatgta accatatatt atattgtcaa
214801 gaactctcca atcagtatct tctatgcttc aatttttcca ttttaaaata
214851 tgcactctaa atgtaattac aaagcaccac aactgaattt tgtacttgaa
214901 aacctataga tatgagttaa acaataaagt ataaataaca accttcactg
214951 acaatccctt ttccagttaa aaatgactaa gaataaactg tttttataag
215001 tttttataac caaatttgag ggagaggcac ttctcaaaaa tgggcaattt
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215101 ggaagcctca gtacagacta catcagaaga aaaactcttt tataagagaa
215151 actcatgtcc ctgtttaatt actctttatt tctaagtac agtaaacactg
215201 aaatacattt ttaaaaataa ttaacatata aagttaggaa tatatacaac
215251 tactactaca tttattatct aaggatccta ctaggctatt gtatttccag
215301 aaaaaaaaac tagtaacttt attcattacg ttccactgta tgtttctgtt
215351 gacagctcca gtcaattgtc agagctaaaaa ttccacctt tttatagcta
215401 ttaataattg tcaattgatt aaaaatttat attagaattt tacaattcta
215451 acctatagca gcgactcgaa ccaaaagtcag tattctcaaa aactggtaac
215501 tatcattaaa gcattagatc ttaactgaaat taacaaatgg ttactcttta
215551 aaaaacagaa ttatcaaggg agactcaata ttacgttttc attctttctt
215601 gtaagcacat acatatataa cataacaaat ttgggttagt tactgtttat
215651 galattaaga catggtttat acaaatagtg tgaataacaa ctattttaca
215701 gcttcagtaa gccctgtgcc tgtctatgac ctgtcaactc ataaaaaact
215751 taacatgaga gaatagagat gaaagtgatt ttgctaaaat tatctgttat
215801 ccccaagctg ttcaaatggt attcggtttt tctggctgag taatttgata
215851 taactcttca tctctccaaa gttggaaggg actatatgag tttctgtag
215901 aagtttgaga catttaagtc acaaaactcg aaagtattgt atctcaacta
215951 taagcagtaa agatctctgt ttaactaaat taattagtga aataccaact
216001 ttgactataa ttaatagaca tgctaataa gttttaatag atttttcttt
216051 gttatgtgac tatcagctaa atataactt taagccacat tacgaataa
216101 tatgtgcagt taacacagat catatatata tccagaaaat ggaanaattg
216151 ccaaatctac ctgtatccat tcaagtaata ctgtttaaga acctattata
216201 taccatttag gaccactcaa aatcattact tttacataa gatttacaat
216251 agactaaaga aagtatttct tgatcaaatg caagagtttt tacgccatta
216301 caaatcatcc aagataacca aaacctgcac ctactgtatt gtttatttca
216351 ttattatttc attacatatg catattgcat tactgacttt taattttcat
216401 atactggcaa ttacacagaga ctttcaggac cagtaaaagt aacttggaata
216451 gacccaagac aagttttcca aataaagtcac atttcttcat atgggtccta
216501 gtaaacattt gcaaatacat aatccttctg agttaaaagt gacacctgac
216551 tttagaatgt cccatgtact caagataacct aacctgttaa attgacctcc
216601 ctacgaccca ttctactcca ttcaaggcag caaccgaagt ataccatggg
216651 cttttcttgt tctcttoaga gttagaccta ttctatcta cttttgctt
216701 gttcacatct caaatctcag tcaatttctt tcaaggccatc tctttctcat
216751 aaggaaaaac gtgtgcccc attgcctctt cttttattgg atactctgga
216801 aataaaccca ttccaatttt tgtgaaccaa agaaaacggt tagtctcat
216851 gcaataacta ttatcaggta cctactatgt gccacacact gggctagacc
216901 cttaggaatg gctaagtaaa aactcaatgg ccaaaaaatt tctgtagca
216951 agaaaaaagb aatcactgta ttccaatgtc agattagatc tcaaaaaacg
217001 tgcaatcaac cttgaaagct catgaagaac cccagaaaac ccatatgcat
217051 ccttccaaat acctatccac ctattaaact tgcctttctt taagcattca
217101 tatttagaat aaaaataata tcttatccaa cataattatt ttatttttag
217151 ttctgtcatt ggaattgact ttcttatatt ttcaaggata gcaattggtt
217201 ttctacagca tgggtaaaat acatgcttag actataata acgcccacaa
217251 gtcaattgat aaactgttcc ccagggaaaa tgggttctaa atttccaaac
217301 acccattcac aagtaaacct ctcaaataca aagtgttgtt aaattgggaa
217351 tgcattatcc ttatttctta tttttacatt cctatgggcc tgggaaatgg

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FIG. 1 CONTD

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217401 taccatcact aaggtaaacac agtgaatgat tagtttaaaa taaaaaattta
217451 ttctgaagag tgtgaagctg tatgc aaata attttcaccac agtctaagaa
217501 ggactgagca tgggaaaaatc taataagaag taanaagtaag ttgtgatata
217551 tatctctatg atgtttactt ttaagtgc aa gatactaact agcccgagaa
217601 aggttccccac agaccagttg agctgtctct tatacatagg tcaacagtct
217651 aaaaaaaaaa ttaaaacctg caaaatccca caaaacaaaa cctgttttac
217701 aggcctctgt acacgttagag gaaatgttag agaaattaca gccattttat
217751 ggtctatcta ggggtacaagc ccttctaagt tgtttactga tactctgcag
217801 aagttttcat ttcaagttgt ttgccttaaa ggattcactt gaatcaataa
217851 ctaaaagacat atatatTTTT tgaggctagc agagggtaga ttagaacctc
217901 tgcttagagt ggtgtalccct catgcagtga ctcaatttca cagttaacaa
217951 catacacttt ctctccctca cagaacaatg attacatgcc tccctccatg
218001 cctttaaaaa gatataata attggcatac actctcctat ttttaagatta
218051 taaaaaaaaa gttttattgg aatgtgaata gatattttta agagtttatt
218101 tttctttgct ctattgctta tacaacacaca aacacacaca cacacacaca
218151 cacacacaca cacacatggt tatattagct cttcaacaga ataagattat
218201 acgagaggaa agcttgggtat aaactgtaag aacaaaaataa ctgctttatt
218251 cettacttag aaacccaaat gattcatttc attttacata aagtaggaaa
218301 aatcaggtgt cacttattgg gtctaaaaga agcagctcaac atttaattat
218351 tatatccttt gaagtaaacg tatcaacatt tttattttaa ttatgagaga
218401 atgctgtaat ttataataca aaacagtgat aattcaaaat ttactaacaa
218451 tagacagaaa gagataacct tctaattttc atgacgttga aaggaagaaa
218501 tgaaaaaagg tatactgtac tgcccattat ttatttttgg aaactcttgt
218551 taataaaaaa cccatttcca aaataagata ttccatgaac acagaattag
218601 tggtaatggt tcaagtgccct tagggcaacag agaagtatgt tttgtagttt
218651 tttttaacc cctcctagta acagcaattc attatgcaca aagaacaacag
218701 gtaacagcat ggtttataat gcatatataa gtaataactg cagaacctca
218751 attaaaacta aagttttacca tattccttcc atttctataa accagtatag
218801 ataaccttgt tgatactcac caaatgttac agaaatgcct aggcctttct
218851 aagcaacaaa atgtagacac atggtgaggt gctgaagaca gctcttctct
218901 gagctcaagg cacttttagt gaagttagct ttatcgtcca tttaatagag
218951 gttgcctcct attaccaagc gtggcagaga aaagagtttc cacaattagg
219001 tcttgacttt ctgtccctct ttttgaagag taacagttac cactggaaaa
219051 cgtttaccaga aaatgatcac ttgaacactc acatagggca gctgtaatt
219101 tccactctct ttgcttgctc tcagattcca agccttgctt gtctcttaat
219151 ctgtcacagg cagttctgtt ttctgtcaaa ccagcttgct tatgogttct
219201 ccactccctc tctaacactt gctttcagat acgtaccaca gtccacagctc
219251 ccttttactt cctccctcct cagctctgta acgtcacaga aatgogtga
219301 aagctgaggc aaaaataatt cttgggcca aagaaaaaa agtctagaga
219351 taacaaaaat tttttctcat cactttttc tgtctaaat cttactgtg
219401 ttcatgcatg gggttttgtc aactgattaa actggctgga ccacttgtt
219451 taaaaaatga aataaaggtt attttaaaa aagtcattgt gatagtaata
219501 ataacagatt caactgtcaa tatgctagct cctgaaggaa gatgctatc
219551 ccaaccataa gaaagtgagg caagtaaaaa cacaagttact tgtattagaa
219601 acttaactct aacattttaa aagcaaggaa ggttttagag tacttataat
219651 ttaaactgtg caattttatg aaaaaaatgt attctttaat acggtatat
219701 ttgaaacttg gacccaaatt tgacgttata aaagggaaaa ttataaagaa
219751 catagaaaaa tattgacacc aaaaaaaaa gagcagttta atcatgtat
219801 tgcaaaccaa atgtaattat tgcgttggga aagaaggttt ttttccccc
219851 taacattac cggtcagaat gctataacacc tctataaaga attcaaaagt
219901 ctaaaaggcta caaaaaatta taaaagtgat tatcacata caattataga
219951 gtaaaagtac taaaaattac gaaactctct gtaaggtttg gggatgagga
220001 attaggtaga aagctgagtg ggcctgggtt tggcaggttt agatggcatt
220051 tgtaggattc tttgaaatta ggaggcaatg tatgcagctt ggaatacgtg
220101 ctggctctgt atgaatgcta gtcagatcct gctttggagt tctgttccag
220151 ttcttagtgc cagaacactt ttaggttctc catctcccac tatgtcccac
220201 gtcaaaagtc ttgggcccct ctactgacgg atcttccaag tacagaagga
220251 acagaagtag ttattagacc tattattaag taacacattc ttattctctg

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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220301 cagaattaaa atctctctaa gaataataagc ttaagtaagg tgaaggtaa
220351 acatctataa acagttgttt atatccctta agaaaaataa gtcagtaaaa
220401 gtgcgcctta aaataaaggt gttttgatct cgtttattta aagtagaatt
220451 aaaaattaac tatattatgc agttatttgg ttatttctta gcaccttaat
220501 aataggttaac aaagacgact agagatttagt ctgccaaatt ttctttcaat
220551 tagtagtttt ataattttta gagtttttat tctccttttt aaagagatgt
220601 taaaatggaaa taattctaaa tcaactgagg tatgaagtgt ctagtacctt
220651 aggttatact cagagagtgt tagtataatt aaagaaattc agaatttata
220701 aaagtggttc ttaggataac tgcaaggtta atttaaaact ggggactgt
220751 atatcaatct atagtggatt caaaggcaca aagtcgaagt aaggacttta
220801 aaacatataa ttaactaagt tattttatgat tgtttgtata tttaatttct
220851 attaaatacc attccatttt ccaacagcaa gagtgcagaa atctcataat
220901 atacaggaaa ctgggttgag tattcagaag gatattgcct cagtagcgga
220951 accaaattag ttttagatta aaggttgttc tgggtccctc taatagagat
221001 taaaagtaag ccccgaaaag atcgaaattc ttccaaataa ctgcaaccac
221051 gagtaaaatt ttaaaatatt tatataaatt ttttaaaatc tagcacacaa
221101 taacgtaaaa ttcaacaatt ctgacatcca gtcaaaaatc accaggctga
221151 caaagaagca ggaaaaacata atgcataaag agaaaaatcg tcattagaaa
221201 aagactcaga aatgacacaa ataatagaat tagtatacaa agacattaaa
221251 actattaaaa atacttctca taggttcaag aaggtattag aaagataaqa
221301 atgttaagga gagacatggc agatataaaa aagatctaca tcagatttct
221351 aagaattaaa attacaattt ctgagaaaac atttattctg tttcatggaa
221401 tgaagttgtg cctaactcta gaatcacaaa taaggccaac taagatcttt
221451 aaacaacagc aacaacaaca aaaaaaccct ataaactctg gaatgaaaat
221501 tacaccaaat gagatgaata gcagactgca cccgcagaa gaattgatta
221551 gtaaaacctg agcacagtg acagaaacta tcaaaaataa gcattgagag
221601 aaaaaaagtt taaaaaaaat aaaaatgaac gagaatccct gaactatggg
221651 gaaacttaaa agaacctaat gtatactata tatactatat tttagtcttt
221701 gaccttgaat aaacatcagc agtagccaag aaatagttgt tacaggcctt
221751 gggcataaac cagtaactgt ctggcttcac gttgcacca gcattgacgc
221801 agtatagtcc tagcagtggt ggtcacaaqa gggcttgac catccctccc
221851 cgaactgtag gcaagctcagc aaggagagac agagaaagac tcagtgaagg
221901 aagagaacac gagactgtct ggtaatccaq ggaattctcc tggatcttac
221951 ccaagaccac caaggcagta tctcctcaag tctgcaagtc acaacattac
222001 tgggctttga atatcgecta atgcaaatlt ggtcgcaagt accaaagact
222051 tagatcacaa cactcaattc cctttgaata tctggaaaagc ctctcctaaa
222101 aggacagata cattcatcct tgagagggtct ggaaaaaaaa aaaaaagaca
222151 agtacaaata agctcgaggt gtgaagatta gaataaatac ctaactcttc
222201 aatgccagca caatgacaaa catccagaag catcaagacc atccaggaaa
222251 ttatgacctc accaaaacca ctaaaatagg aaccagtgac caattctgga
222301 atgacagaga tatgcgacct ttaagagaat tcaaaatagc tgttttgagg
222351 aagctcaaaq aaatccagga taatacatag aaggaattca gaatcttact
222401 agataataa acaaaagagc tgaataaatt aagaatcaag cagaattctc
222451 ggaagctgaaa aatttaattg acaaaactgaa aatgcataca gagtttctca
222501 aaagcagaat tgatcaagca gcagaaaagaa ttagttagct tgaagacaga
222551 ctactctgaaa tacaagagc agtcaaaaqa aaaaagaata aaaaataagt
222601 agcatgccta caggatctag aaaatagcct caaaatggca aatcctaagq
222651 tcaattggcct taanaagag gttagagagag agatcggggt agagagttta
222701 ttcaaagaga tagcagagaa cttcccaaat gttagagaaq atatcaatat
222751 tcaagtatga gaaggttata gaacactaag cagattttac ccccaaaaaa
222801 ctacctcagg acatctaaata ctcaaaacat gaaggtgcac ggaataaaga
222851 agatctctaa agcagcagaqa gaaaagaaaa gaataacata taaggagacc
222901 ccaacacatc tggcaacaga ttctcagtg gaacatcac agggcaggaa
222951 agagcagtaa gacatatttg aaggtctgaa agaaaaaaaac cttttatcct
223001 gaaatattat atccagtga aatatccttc aaacatgaag gagaataaaa
223051 gacattccca gacaacaaaa agctgaggga ttcatcaac ccagacctgt
223101 ctacaagaaa atgtcaaaag gagttcttca gtctgaaaqa aaaggacatt
223151 aaggtacaat aagaatcctc tggatctctg ggcaggagac ggtagctcac

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)


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223201 atctgtaatc ccagcacttt gggaggctga gacaggaggga ttgcttgagc
223251 agagaagattc aagaccagcc tgaataacat agc-aagacct catctctaca
223301 aaaaatcaaa attagccaga attgcttgcca catgattgaa ccactgcact
223351 ccagcctggg tgacagagca agaccctgct gaaagaaaga aagaagaaaa
223401 gagagagagg aaggaaggaa ggaagggaag aaggaaggga gggagggagc
223451 gagggacaga gggagggagg gagggaggag ggaaggacat atactcaatg
223501 gaataatatt cagctataaa aaagaatgag atcctgtcat ttgaacaac
223551 atggatagaa ctggaggaca ttatgttaa tg-aataagc caggcacaga
223601 aagcaaaact tcacatgttc tcattcattt gtgggagtta aaaatttaa
223651 caattgaact cacagagata gagaggagaa tgatgtggc aggaagcagg
223701 gcaaaaggga tagttaatcc actaatggga tgagtaaaa aatatagttt
223751 aatacaatga ataagatcta gtatttgata gcacaacagg atgactacag
223801 tttagcaataa tttgtgttac attttagaat aactgaggga atacaattgg
223851 aatgctcttt tttttttttt tttagatgg agtcctgtct tgctaccag
223901 gctggagtgc agtgggctga ctttgctca ctgcaagctc cgctccag
223951 gttcacgcca ttctcctgcc tcagctccc aagtagctga gattacaggc
224001 atccgccacc atgccagctt attttttttt tttttttttt tgtattttta
224051 gttagagacag ggtttcacca tgttagccaa gatggtccg atctcctgac
224101 ctcttgatcc gcctacctgc gcctccaaa gcactgggat tacaggltg
224151 agccactgca ccagcctggg aatgttcta acacaaaaaa ttgacgaata
224201 gttgagatga ttggataccc tatttaccct gaggtgatta ttacactttg
224251 catgctcata tcaaaatatt tcagtatccc tataaatata tacacctact
224301 atgtacccta aaaaattaaa ttttgaatt taaaagaca acaccttaat
224351 tgaaaaaaaa gtcactccaa aaaaatagtt tgttttgatg cttttaattc
224401 taactatca ttacagaatt ttaactctac tgccttgctc ttatattcac
224451 ctctcacttat accacaaatc ttgttctaa taacacagta acataatgat
224501 atatttgctt actccttcaa tatgtcta atagattcaa aataacagta
224551 ccaaaattac taaaaaataa atcactgaat gaagtttaaa gaattctttg
224601 ccgttaacta atgaagtgtt cagcatataa ctgctcagtag tgagtcttaa
224651 tgttaaaatt taattatttt acgtgttata aaacacaaac tattttacat
224701 tgttattcac aattgaaaga aatttcataa aacaagattt caatttcttt
224751 aagtagagac tttaacaacc tataaatggt gtagtccaat ggagttgtct
224801 caactattaa gaaatcaca ggaagaaaaa attaaatgat gtatatagat
224851 caagttacag tcaaatggca tcatggcatg ctaaatatgc aatgatctta
224901 cagttatttg aatacaaaaa aatggtagga aaattattta tcacttaaat
224951 gtggtagctt tggtagctta actatgcaga attccaagtt acctcctcca
225001 cctcagcagt catatttaca ttattgagtg ttgtaaggct ttgaatccat
225051 cttggcatac tgcactata acaattcact agcaataagt cctataacta
225101 gccaatgaat gtttaaggta cattattgaa ttgatagtc cattaaaaa
225151 aaacattagt gtttaaaaaa gaggtcattg tcaacataaa aaacaatggc
225201 acaaaacctg gtttgtcatg atccccccc aaaaaaatca agactctaac
225251 atgtaaaaata ctcaatcac aaatacataa ttatatgatt aagtgccacc
225301 tccacaattt agtgctatat ttgtaattaa ataatttaa ttttacttta
225351 ttggttttac agttattttt atttaattaa catatttggt ttattttaa
225401 tatataacag ttgtaagaaa aagtgtatta aggccaggc ccagtggtct
225451 atgtctgtat tccagccctt ttggggaggc tgaggcaggt ggaatgtctg
225501 agcccaggag ttcaagacca gcctgagcaa catagcaaga cccgtctca
225551 aaaaaaaaaa aaaaaatga agaacaaaa atttagtatc ccagaagcaa
225601 atgctatgt aatgataata gtataaaaa actagaattc caggttgagg
225651 tcagattatg gagagagcga gtgctagaca aaagagctaa ataatttggc
225701 gacaaaaacg gccatgatca gaactttctg taatgaatgt gaatttggca
225751 gaagaatcaa agggcaaaag aacagtaggt gatgaatta aagttaactc
225801 agtagtctag gatgacagtg agggttaacca gacagtgagg ataaaaggac
225851 tacaagagta taatagagaa taggtttggc aactgaaaaa atatggatag
225901 taattgagag acgagtcaag atcacaaagg attccatgac ctgtgtgaca
225951 gtaagcaggt tataccttta aaacatatag gaaccacagg aegaaaaata
226001 aattttatga aatagccagt tagttgatat ataacaagtc cgagatgcca
226051 gcaaggcttc tggatataaa tgcccacagg cagctgaaca tacagaacta

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FIG. 1 CONT'D

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226101 gaacttggag agaaaaacaga ctggagcaat atactctggg gtcatccatc
226151 ctgccactgc agtacgagag agacacaaaa gagagccaag gacaaaaactt
226201 caagaaacat ctacagggtgt tggtagaaaa agggccaactg gctgggcgtt
226251 gtggctcacc cctgtaattct cagcactctg ggaggcagat cacttaagcc
226301 cagaagtcca agaccagcct ggacaacatg gcaagaccct catctctacc
226351 aaaaaaatc atacaaaaat tagttgggtg ttggtgtaca ctctgtggt
226401 cccagctact cgagggttgc agctgggagg gtcatltagg cctggaggcg
226451 agaggttgca gtgagctgag attgcaccac cgcactccag cctggggcaac
226501 agagtggagc cctgtccctc ccccccacaa aaaaggcaac taataaaca
226551 gtggttagag agggagagga gaaactgaaa agtatgttat cgtgtgacc
226601 aaaaaaccca gacctcaag aaaaagaagc atttaaaagt acttactacc
226651 taacctgtta gtctaatctc taagtccccc tttaacttct tacaaggcaa
226701 aggtattagt gggaaagggg cctttagaga accacttggc ccagagaaag
226751 ggacttttaa gaattcatat tccctaaatt gctaaagaca taggcttgta
226801 gtcagcgaga caaaaagaca qcagggacca tcagagcata cagcagtaca
226851 gcaaaagcatg aggcagggcag aggactccag gccagccctt ccgggaaact
226901 ggtaacactg gctctgattc aggcagcatg cataacccaa ctctgccatg
226951 ccatgcctag aacactgtat gggagattgg agacttagta gtacttgaca
227001 caacaatagg attaggatta taagaggtta ggaataggta aatagagaaa
227051 tgaactgata ttactgtttc caagtgttgg atataagac tagaaggaca
227101 gctttgaagg ctttaataaaa gaggtttttg ttgtcttaa aaaaaaaa
227151 aaaacctttc aactcttgtt agattgagtg ggacagacag gaggaaggtt
227201 gaagatgaga aagggataat taatggggca tgaatcttga gccacaaag
227251 gagggatcac agaacataag tgggaataata tatatttttc taaaatgaa
227301 aggaggagaa agcattagta gagactgccc agggaaagag gaatgaagtt
227351 aggaagcaca ggtttacttc aattttctca gaaaagcagg actcaccact
227401 atctgaagag aacaaaggta gataaaaaa atatgtgttt gagcagagatg
227451 aaaaattggct ttatcagaaa acccatactg ggctgggacg agtggctcat
227501 gctgtgaatc ctaagcagtc tggcaggaag taggaggatc ccttgagtcg
227551 aggagttcaa gaccagcctg ggcaacatag ggagaccctc tctctattta
227601 aaaaaaaaaa aaaaatccac ataaatacag taagaagaaa agctaaaagg
227651 ttgtactcat gtacacaaa tctaaagttt aacagttaaa gttccgctta
227701 tatccacaca attccactta tatctaaaa atataacac gctaagtaca
227751 tgctatgctt ttccacaaac tgcccaattt aaggaaatac aaaggatgag
227801 gttaaagaac agatcttgga gccccaagat tcgatataca gctagtacta
227851 taacaacaaa atgggcttag tgccataacc acaggcagat ggtgatacta
227901 ataattctca tatttccctg tcttcttttg ctggatccat gttctgtttt
227951 ctcocacaact ggtacgctta tgaaaagttc ttgctcaagt cagttaaaga
228001 cataagatac cttttagtaa aagaacaatt cccaccctgt tgagaactga
228051 tgtacattct ctttttatga ggtgtgcatc actccaattt tccaagtttt
228101 tacaattttt cacttttcta caaattattg aaaccagaac tatacaaaaa
228151 ttttatgttg gagaatcata ttattactgt tataaattct taagaagta
228201 acttgaagc tgggtctctg aagccaagaa gaaaaacagg atctaaagg
228251 aacacagaaa gaaaggacaa agaaaagaagc aggtgagtg aagggacaga
228301 aaaccttgag ttataataaa cttggtttaa aatgtcaaga gaaactagtc
228351 tcaaaagtac tctttctaca gagtataact gcttttaact aatgaaagta
228401 ctccactatga caattttcaa agtcaaaagc atttatggca acaacaaca
228451 tagcaattgc aatataacat attcaggtaa tttaactgaat ggaaaaact
228501 ctatggaatt catccagtaa ttatgtggg ttccatttat aaaaactatt
228551 ttaccacaaa tctgaagact tataaacat gatctagtat agggagaagt
228601 attataactc tttaataact attaatcaca gaacaattag tttaataac
228651 tataaccaca gaatggcatc ttgttttaca aataaaaac aaaccagtcg
228701 actgttctag ctgtactcat tctaaacatg tctttttatc tttaattttt
228751 aaattaaagt tccattaaaa aagtattttt tattttctat gcttctctat
228801 tgttttaaaa tcccagcccg gttggtgac ttgtgtctgt aatccagca
228851 ctttgggagg ctgaggctgg tggattgctt gagtccagga gtttgagacc
228901 agcctgggca acatagtgag acctgtctc tatcaaaaat acaaaatctc
228951 agctgggcac ggcggtgtgt gccctgaatc ccagctactt aggagcctga

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FIG. 1 CONTD

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229001 ggtagggagaa tctcttgagc cttggaggcg gagggttgcag tgagccggaga
229051 taacgtcact gcactccagc ctgggcaaca gagagagact ctctctggaaa
229101 aaaaaaaaaa aaaaaaanaa tcccccaact ccctctctctc taattccctct
229151 ccccaagatt aagcactatt caaagtgtcta tctctccaga cccttttttcc
229201 aggcatacgt agatgtatgt atttgtttga atacacacca agataattttc
229251 tttaatggaga taatactata cacactgcata tataatttat ttatttctctt
229301 tatagttagat cttggatttc tctacatttg gtacgtctat ctcaattctct
229351 taaaagtgtt gcatggttgc acagtagatg cacttggcac tgaaaactcg
229401 acttaagtat atccccagga tgacctgaa tgggtgtcac agttttgagc
229451 taaggaatct gggalaagct ggagaccat tcttatctta tgaggaacat
229501 tcgagccccc agcctggctc atggaacaca gggcatagaa gggatcgagg
229551 tctttgtttt tgggttaaat gaaggttacc aggtggagggt tgttagggag
229601 aaggcattaa gtgasaatgc tatgtaaact gcatgactgt tgcaagcagt
229651 tggttctctt gcctagccca ctgccactgg actctcttcc ctgtatgtaa
229701 actcccccca aaacctctgt tctccttgc tggctctggg tctccttggc
229751 ctctagaacc tgggtccact cccactggag ttgatagggg ttacgacaaa
229801 atttgtgttc cttaattttg ctgtactaca gtttgtttaa ccacttctct
229851 atatatagac atacagggtg gtgaggggtgt tgttttttgt ttttgttttg
229901 ctactttata atctatttta aaatttaglca ctgataacat aaacaaatca
229951 gaatttaaaa acacaatgtt aattctcttt ggaanaaaag ccataaaggt
230001 attatttgtta ttattctaat aatcacagata aatataattt acctttggca
230051 tttaaaaaaa aaaaaatggc aaaaaccaca attacttttg caccacacta
230101 ataataagca ttttttcaat tttaaatatt ttggtttctc acagtttgata
230151 acaatgcata attctgtcatt gttttcaata caatgtttatc aataattctg
230201 aeaatttaca catgcacact attttcaaat taactgcaca ttatggcctt
230251 tggatatgca ttggataccc aatgtgtttg agggctaaat ctcactaatt
230301 ctccactatt actcaattac gtttaagccag cagtcaccaaa cctttttgcg
230351 accagaggat ggtttttggt aaagccattc ttccacggac ctggaggttg
230401 ggatgcaggg gatggtttcg ggatgaaact gttgcacttc aggtcatcag
230451 gcattagagt ctataagga gcctgcaacc tagatccctc acatgcacag
230501 ttcacagaag ggttttgtct gtctatgaga ctctaattct gccactgac
230551 taacaggagg cggaattcag atggtaatgc ttgccagcca gccactcacc
230601 tctactctgt ctgcccggtt cctaacaggc catggacagg tacaggtctg
230651 cagccccagg gtaagggaac ctgcattaa gcaactcttg atttgtgttt
230701 tcagaagcct agtgtgatca taggttctct aaggaattca aagagggtct
230751 gtgataaag actgtctctc aaggagcttg tacaactttt gtgaaaaaaa
230801 aacaaacaaa aacaaacaaa aaacacttag ctatctatat aaaaattata
230851 cactgasta caaagttttg agaaaatac aaagggaaga agaatatgca
230901 aagggaacaa ggtatatttt accgtatttt atcataaggt aaaaattaga
230951 gattacctaa gtgagggaag aaaggagata agtgaagaaa atgggacttt
231001 tttaattgta caaaactcat agactttata aattcttcta aaacaacata
231051 ttctctgagg atttgttagc aaatecctaa gaaatggaaa tttagatgca
231101 ctttgaaaaa gtactaggat ttggatatag tgagatagaa aaaggaaaca
231151 tatcccgca taggaaaatt ttttagcaaa aatgcaaaqa ctggaatgaa
231201 agtgaagaag ggcagggaag agaggtaggy aatgggaga aaagaaattt
231251 gtggttaaaa ggaataatac tagggaagtt ttgagtgag agtggtggac
231301 agggagggca catatatttg ttgcaagg agaaagcctg gaggaaggtta
231351 aaaagctatt cctgtacac ttggcccac acgtttttgt cccatttcaa
231401 ccaatactca cctttttaa tggcttctac aagaaatcca galacaccaa
231451 gtatttctctg gcttttgttaa gtttttatat gtgaggtcac agtgaagttg
231501 caaataacac gacatagcat ttctccagag ttctctatcc ttctctgtg
231551 gattttccct gtgcctttca agtttttctt ccttttttta aacagaaaaa
231601 ttaaactcta tctctctag ttccaaaat gtaattctaa ctactctaa
231651 actgcaacaa aacagagact cttccaacgg caaggacata cctccttaaa
231701 aggcaattta acaaccgtct ccaaatactt gaacaacccc ttgtggagt
231751 caacattcat cacaatgaa ttatccatgc ttctcttcca acaaaattct
231801 gcattttcta tacaattctt aatgcttact aaagattaa caatttctc
231851 attgggtag agtcaaaact gcagatgaaa gatttgcctt agtaaaaaa

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FIG. 1 CONTD

SUBSTITUTE SHEET (RULE 26)

WO 03/000298

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231901 agcataatgt tataaaaaat gaatcatctt ttccaagaaa tagaggcagc
 231951 aacagttctt aaaattaaat aagaactaga agaattgtag gagacagaat
 232001 ctgtataact gctgagtaga acaaaatccc caggaaacctt ctgaaaaaac
 232051 aatttaccag aatattcatg ctttttaaca tatcaattctt actaacaanaa
 232101 aqctatcctg agaaaaataga gatggctaga tggtaaatga tgttattgca
 232151 atgttattta caaaggaaag ccaagagtat ctacaaaagg gaacacagttg
 232201 aataaattat gttatgctac catcttagaa tattatagac atataaaaat
 232251 attttaagtg ccttatatag tcacataata aatatatgta aataaaaatc
 232301 aagaatatagg actaatactt caaattcatt ttaaaalcat aatatatta
 232351 tatatacaac tatgtgtgtg tgtacagaga catgcataat ttatatatag
 232401 taaaagacta gaaggaaata caacaaaatt ttacacagtaa ttltctctgg
 232451 gtatgaagac tacagattac ttttttcttc tttaataatt tctgtaacaa
 232501 tcaaattttc tacaatagca ttataagtg gaaaatttgt tttaaaaaag
 232551 gagcagcttt gtttcgccat taagttagca ttaaaaaaaa atgtaggctt
 232601 gctgggcaag gtggctcatg cctttaatcc cagcactttg ggaggccag
 232651 gtggaggttg atcacttgag gtcaggcggt cgagaccagc ctggccaaca
 232701 tggtagaaatc ccatctctac taaaaataca aaaagttagc tgggtgtggt
 232751 ggtgcgtgcc tgtgttctta gctacttggg acgctgaggl gggagaatca
 232801 ctgaagcctg ggaagtcag gctgcagtta gccaaatgca tggcaactgca
 232851 ctccagttct ggcaacacag tgagaccctt tctctagaaa ttttaaaat
 232901 aaaaaataaaa aataaaaaat gtggccagcg gcggtggctt acacctgtaa
 232951 tcccagcact ttgggaagct gaggtgggtg gatcatgagg tcaagagttc
 233001 aagaccagcc tggccaatat ggtgaaaccc ctctctactt aaaaaaaaat
 233051 atacaaaaat tagcggggtg tgggtgtaca cacctgtaat cccagctact
 233101 caggaggctg aggcaggaga atcacttgaa tctgggagcg agaggctgca
 233151 gtgagccaag atcgtgccac tgcactccag tctgggtgac agagcaagac
 233201 tctgtcttgg aaaaaaaaaa aattaaatta aataaaattt aaaaatgtg
 233251 gctctgatat atttatgac tatcacctct acactattgt actggtgaag
 233301 cctatagact tctgagtttc cattataacc ccatgttgag taaagtttta
 233351 agggcacagg aagggtgctg atttggacct catacagaac aactttagtg
 233401 acactagaat gtgagctttg tgagggcagg atgttgggtg gttttgctca
 233451 ctgcttcatc ctgagcacct aaaataatgc ttgtacacag gtaggcactc
 233501 aacaaatatt tgttaataaa tctccaacta attttttaaa aattataaat
 233551 tactttcctg ttttctacta tgccttttgt ctctaactat aaggaaaaaac
 233601 agagaggaaag tgcgtacttt tagatgatga gtggggaagc tcataaagac
 233651 agaactggag ttttttggtt tcatgtgtg tttttgtcct acaaaacaaa
 233701 taatgctttc tctcagaaga aagctcactc aggccttact tgacatgttc
 233751 aactttacta ctgactttcc taacaaagca agagcattta tgcgtgaacca
 233801 catcttctgg aaagtcttgc ttttaccoca actgtctcac tgttcatgga
 233851 tggggagggt caactaaact gggttgtagt gaggacagaa catgtcaact
 233901 tgttactggc tttagaaaaa gttagaccag tggcctatga ttccaaatag
 233951 aagaactatt gcccttctac agaattgtct ttcaaaacct gccctgacc
 234001 cacaacaaaa aatcgggcta acacaaaaac cccagttaaca agctaactatg
 234051 tgtgcaagta aagcaaaagt ttcaaaaaac aactgctctt accacatctg
 234101 atgcagttct atattgtcta tgcatttcaa tttaataatt ttaaactgtg
 234151 gattacagct cagcaaaactg attttatgac ctactagtga gtggaaagcc
 234201 acagtttgaa caatgctgac aaggagacag tgctttcttc ccttggaact
 234251 gtaggcacta tgtaacggag tatctagtca tgaagaaaaa tggctctgga
 234301 gcctcctacc tgaactcacg tactgcctct gcaacttaca aggtgcttgg
 234351 acaaatfact taacctctct gggccctcat ttccctatat gtaaaatgga
 234401 aataacatac ctatgtcata ggattattat aaggattaaa tgaattaatg
 234451 tataaagtac tcagaatagt gctctgtaca cagtgaqcac tgtataaat
 234501 ttatgctaaq tttatttat taatgtgct actgaggagg aaaaacacac
 234551 actgagaatt aggttaagat taagagaagg tcaaggaggtc ctacgtatcc
 234601 tgaatgctctt gttagaagca gaaaaageaa actgataatc tcaaaatctt
 234651 ctacatagaa ccaagcaaat gttagtctat agtaatttgg tgttctcttc
 234701 tgaatgctaa atagatatatt gaattagatc tcacagttta tgttggcact
 234751 taaaattctca ctggctctta tctgaaccca atccactctt gattaagata

FIG. 1 CONTD

SUBSTITUTE SHEET (RULE 26)

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234801 atgtttggtat agtaaatccat tccctgattag tgttgaatag ttaattttga
234851 gatagtgggc acttttatatt ccaattttta aaatagcctt attgagatat
234901 catttacata ccacaaaatt tcattatttt agtataccag ccaatgattt
234951 taggggatlg aggagagttg tgtaatcaac gctgcaattc aatttcaaga
235001 cacttccttt actcctattt gtatcatctg cctacttgca gtctgectat
235051 ttttaaatgag gaaaacaatc atgcattgcc agggcatcca aaaaacccaa
235101 ctaattcccc caaataatgac taacataccc aacttaacta tttaacacta
235151 ctgtaccaga tagaataatc attttccttc tacagtgaag ccaacatgtc
235201 ctgtaatgta aataaacaat agaataatat gtttaacgata ttaaaaatat
235251 tatctaattt ggactcaggc acctggcaga agcaataaac agaagcaaat
235301 aacgggaagca aaaaccttca gggaaaggaa agagaaaaata acaataaaat
235351 acaccttttg gagcttaaga ggaatgggat attctatcag ggggaagactg
235401 aaataaaact gtaatatgct cttatgtttt ccccaagaag ttttcagcag
235451 tgcttacagg cagaattctt atccccattt ttcaatccag aaatlaaaat
235501 ctgagttaaa aaaaaccctg caagtactta tgcataatat tcagaaagtg
235551 agaataccca ctagggtagg ctataatgaa aaagacatac taagcaactgg
235601 caaaaatgta gagaactgg aactctcaaa cattgctggt aaaaatgtaa
235651 aatgggacag ctgctttaga agcaggtcaa tagttctcta gaatttaaac
235701 acagccacagc tatgacccag caatcccact cctagtttca tatccaagag
235751 aaatgaaaac atacacccat acaaaaactt atacatgaat gtccaagaac
235801 gcattatcca taatacccca aaagttagaa aaaaaatgtc cattaaactg
235851 tgaatggata aatgtggatc attcataaaa tggaaacatta ttlggcaaaa
235901 aaaggaatga agtccctgata cataatacaa tatgggtgaa aacactatgc
235951 taagaagcca gtctcaaaaq gtcacatat ttgatgttcc attcatataa
236001 aatgtccaga ataggcaaat ccagagacatt aaataggtt catagttgtc
236051 tagagttagg aggggttga gaaagggga agtgactgct aagggttaca
236101 gagctgcttt gcagggaagt gaaagggttc taaaataatt glgaggatag
236151 ttacacaact ctgtgaacat actaaaaact actgactgt acacttcaat
236201 ggggttctta gaattctagg atacattaat tctatctcaa taagacaaac
236251 acatttgttt tatttatttt ttlgagacac agtctgcctc ttgtcaccca
236301 ggctaaagtg cagtggcagt atctcaactc actgcaacct tccccctcta
236351 gggtcaagcg attctctgc cctctgagta gctgggatta caggcatgtg
236401 caaccatgcc cggctaatgt tagtttttag acagcccggg gtttcaccat
236451 gttggccagg ctggtctcaa actcctgacc tcaagtgtac tactcaccta
236501 gacctcctaa agtgcgtgaa ttacagacat gagccaccac gccacgccaa
236551 gcaaacatat tttaaaagca tcattttgcc atgtgctttt tactctttca
236601 cctcatgtat atttgaaaag aaccttatgt ttttaattaa ttacatttca
236651 attcatcaaa atgttttgtt ttltgagatg gagtctcact ctgttgccca
236701 tgctgggtgc agtgggtgca tctcggtcca ctgccacct tccccccag
236751 gttcaagtga tctctgtgcc tcatctctc gagtagctgt gattacaggt
236801 gcatgccacc atgcctggct aatttttgta ttttttagta agacgcagtt
236851 tcaccatggt agccaggctg ctctcgaaat cctgacctca agtgcacac
236901 ccgcctcgcc ctcccaaaat gctgggatta caggcgtaga ccaccttag
236951 tcatcaaaat attttcaaaq aactattcga taatatcaaa gtctttcaaa
237001 agttcttcaa aagcttattt tctcctttg aatcataaag ttctattcca
237051 ctaaaaaata tgaatttcca gctgagcga catggcaaaa cctgtctct
237101 caaaaaaata caaaaattag ccacatgtgg tggcatatgc ctgtagtcct
237151 agctgctcag aggaactgag tggggcgact gcttgagccc gggaggtcaa
237201 ggctgcagtg agtcaagatc ataccactgc actgcagcgt ggccaacaga
237251 gagaanaagaa accctgtctc aaaaaatagg aagaagaga aatgaatttc
237301 aaaaatgaaa atttccagtg ctgtaatcac agttttcaaa ttcagcttca
237351 gtactgtcaa ttggcaaaac aacaacaaca aaaaccccaa acttlaatt
237401 tttaatctat ttggttcata ttltgcaaga gatgggtgat ctgaaaaact
237451 ttaaccggga ttltatgacc ttccccctcc caccocgcca aatctgaaca
237501 aagagctcaa actacttttt ttccctcttt tatccatat catatagaag
237551 aatgccacag ttgcaaaaag gcaagctatc tctaaaaatc agggccaaga
237601 tcagcaatcc gactacttaa gtcaaaagaa tcaataaaca gtaaatagga
237651 ttaattaaat tcaattcatg tttaattttg tccaggtttt aaacacatta

FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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237701 ttcaatcaca gccatcataa aataagaaat attatattaa acgcattaac
237751 tttagattag aggatgacaa gtttaaggaa gttgcagaca tccattllaga
237801 tatctgtgaa aggaacaatta tttaatat tttaaatgta caagattttaa
237851 ttaatatttc tacagcactg tcaagaaaaa aaggaggccc caatgaactg
237901 acaagtaggc taacatatag atttgtcttg ccatatttct ctalgtaaqt
237951 aaatttcagtt ctgaaaaata atgcataaat atactttaat gatacaactt
238001 cattttacct caccctgttg actttttcat cttatgttcc caaatctcat
238051 cctctgctgg gtltattagca ttttgcagtt atagtatat attttatcaa
238101 tgtattagag acagctaatt gccttccaat atctgttctc cacttcttcc
238151 ctacaaaacac gctgtttatt tcatcacttt gccaaacagt ataaaagctc
238201 aattttccag cgtgtcgcct cagcttccca agtagctgga atgtcagta
238251 aaggagtcag tgtgactllag tctctggaca taaaatgcaa gtaggggctt
238301 ctgggttagac atatttttct ttatttctct aagtaaaacc aaaagccatg
238351 tacattatgt ttattatata aaatgtgttt gctttattga gatagaatta
238401 atgtatccta gaattctaga acaccatta ttctaacttt attagaatg
238451 ctaaagcatca gtattactgt tggaaattac agaatttgaa agtagctgc
238501 atataaaggtc aagaattcagt aagttagaact acaaaagcga aaaaaaatta
238551 ttacetttaa tataacagta aattctaaag gacttagasa taatattlag
238601 aagcgaagaa cacatctgca tgaagaaaaa ataataatc taatctaaag
238651 gcaaaagata agatctgaac tagtgagcaa aatatctgta cattatattt
238701 caactaaaac caaaaggatt ctgaaaggtg gagagacgac aaactggcta
238751 gggacctcag gaccaggagg aaaaacttgt aatgatatcc tgaattttct
238801 tatttttgct ttctatatcc cactctggat actggtgaag ccagcaacc
238851 aggaacacca agtgcaaaag aactgcctcc cctctctgcc cgcctctgga
238901 aaaagctgc ttctctagc caaaggaaac tgaagggggc agcaagacag
238951 aaaaactaaa ggcataaata aactccagac aaacaccaca gaasaaagt
239001 aaactccacc cgacccccac cagcaaaaac caagtggaaa gcttagactt
239051 ccatccctgt ctggctgtaa gagggagcac cccaagctct ttccctaaat
239101 ggggaaacaag gggaaagtgt ggacattcat ccccttgag catgatctaa
239151 tatccccctt cccatctgcy ctagtggaga coactttagg agcctggact
239201 tqcagcccac gcacatgcea caagtgctc ctcccccgac tqcaggagtg
239251 gtgccagagg agacttgttg agtgctggac ttaccacacc acttagcagt
239301 accaaggcct cccctccaca tgggtgcagt ggaaggtccat cagagagcct
239351 taataaggca ctccctacc tctaatgag aggggtacca gtggaggcgt
239401 agtggaagag ctgaaccctc tctctaccac agcagtaaca agcaaacccc
239451 ctcccctagg tggtaacctg agaacaggga gagaaccaag cccctctggt
239501 ggtaatgagg caaccctgtc tacccccagc agtagtgttg gagggtgctt
239551 gctaaaacac agattttaagt aaqaccaga gtcttataac ataatacaca
239601 caaaaaataa taataataca caaatgtcca agtttcagtc aasatcact
239651 tatttaatca caaagagata taccatttgt ttgatggggc cggggagaga
239701 gggataactt ataccaagaa ccaataaaga tctcaaaact aatgattaaa
239751 gacaatcaaa agatgtcaac actgagatga aacagcttga ctgtcaaca
239801 attttctttt cctctcaaaa tcttctggcc cttagatta acactccact
239851 gacattgcac ttatacagta aaagccttta ctaatttata aattataaac
239901 ttgtgtataa aggaagaagt taagtatttc caaggaaatt tagcccaag
239951 aaaagtgcgc atttaaaaat ttatttctgg cggcgctggt tggctcaac
240001 ctataatccc agcacttttg gaagcccaag tgagtgtatc acttgagcct
240051 aggaagttcaa gaccgcctg gccaacatg caaaactcta ttctactaa
240101 aaatacaaaa agttagtllg gcataaaggc attagcctgt ctccccagct
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240201 cagtgaactg agattgtgcc actgcactcc agcctgggag acagagcgag
240251 actctgtctc aaaaataata aataaatata attttaaagt gtatttctcc
240301 cttaattttt tttttttttg agggatgagt ctacattgt cccccaggct
240351 ggtctcaaac tccagagttc agtgatctct ccactccagc ctctctgaata
240401 gctgggacta taaatgcacc cggtctccct tactttttta ttcttaaac
240451 ttaccgttga ttagaagcaa ccggaatgaa ttctgtcac ttctcaaat
240501 tattattctc taattattgt taccgtgcaa ttcttacaag accaaaagca
240551 ttttaaaagt caatttttaa gtattaaaaa atatactgga aagactcacc

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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240601 aaaataattt atgaatgaga tgatactagg tcatttttaa gaacactaga
240651 aaatgtlatt ttacattctt cagtgtagac aaatttttcc aagltatagc
240701 taanaactag gaaaaaacaa atccacagaga cctaagtcag aaatgtgata
240751 cagcttgggt gaggataaaa agaggagaagaa acagctgtgc tactcatgaa
240801 ggactatacc atagatcatt gatgtcttat cattagttatc atcaggatca
240851 cctggacggc aggtgaacaa gattactggg tccttccgc agaatttcag
240901 attaaataaa tctagggcag gtgagaattg gcatatcaaa caagtcccca
240951 ggggacgttg attctgtctg tccaatgacc acattttgag aaccactgcc
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241101 ctgaattlaag agtaagaatt agaggccagg gacagtggtc cacatctata
241151 atcccaacac tttgggaggc caaggtggga ggaactctg aggcaggag
241201 ttccagagca gcctgggcga cagagaaaca ctccatccc tacaaaaaat
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241351 aataaaaaca agtaagcaac tctctccca tacacgacaa ctttattaat
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242151 aggagacatg atgaactacat gtaacgtggc atctctggaac agaaaaggct
242201 cattaggtaa aaaccaagac aatttgaaca aagtatggac tctaattaat
242251 gataatgtaa aaatgtatca gtattagttc attaatgtla acatgtlaat
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242351 atctctcgaa ttttctctga aatctagaat ggtttlaaga aataaaactt
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242451 agtcaaaaaa ttccaatgat ggaanaataa ggaatacatg aatatattat
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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONTD

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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268851 ataatttgga gtattccttg aatctttcgt atgcaggcca cattatatgt
268901 aattaagtc tgtcctcaga acaacctgtg agatagttag tattatcccc
268951 tttttaaaag gtttataaaa gacttataaa atggagatag taatataaat
269001 acaaatatat taaatagggt tgataggatt ggggtggcct tctctattat
269051 ttctaatttt gatactttac ataatttttc cagataacat aatgtttttt
269101 tgtaatggtt catgctgttt taaaagatca agctgttata acaatatctt
269151 atttctctat atatacatat atataatata atatatatat atagtgggtc
269201 ctttacaaat atgcactatt cttaattgtt ttccctacag aatgttcat
269251 ccaatttggtg accaaaagat ggaagtgtgt ttatttttta aaagataaat
269301 gttaagtatc tgataccact acaaatattt acgtgagaag attcatggac
269351 ttgtcttttg gttggaactg cactcatttc tgaaggtttc ttacgccaca
269401 atttctattt gaaaattcaa gtatcaaaag ataccaggtt tagaattgga
269451 taatgatgta ttttgtctga ggactgcmaa ttttataag accacagttg
269501 gattccagtg atattctgca atcaaaagta ttgataaac ctaattttga
269551 agcattttat atttataagc gacatcaaaa gatggggaga aaaaattgga

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FIG. 1 CONT'D

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269601 ggttgaagaa cacactgtta cactttatat ctaaaagtat aaaagtatat
 269651 agacaagtta agctgatgtg gaattgtcaa ggttttgcat tgcgagggaac
 269701 ttttctgaat tagagggaaat taagggttta ttcttgata gccaccaatt
 269751 ttgactgtct ttatcattag ttgtgaaaa attgactttt ttgtaaacttt
 269801 tttttttttt cttttttttt ggtgatggag tctctgtcgc ccaggctgtga
 269851 gtgcagtagc acaatcttgg ctacactgcaa cctctgcctc ctgggatgcaa
 269901 gcgattctcc tgccacagcc tctctagtag ctgggattac aggcattggc
 269951 caccatgccc agctaatttt ttgtattttt agtagagatg gggtttcacc
 270001 atgttggtca ggctggcttc aaactcctga cctcatgac ttgtccacctt
 270051 ggctcccaa agtgctagga ttacagcact tgcacctggc caaattaggt
 270101 gagccactgc acctggccaa aatactttta gtgttacaga aaaattgaga
 270151 ggattgcaga gttccagtaa acctggtact tagctttatc tatgattaac
 270201 attttcaatt tggatgctac atttgttaca attaatgaac caattattgc
 270251 acattattat taactgaagt ccatagtata ttacagttag tttttaccctg
 270301 atgtcttttt ccaattccaa atcccatcca ggacaccaca ttccatttac
 270351 ttgtcatgtc tgtttaggct cctctagct gtgatagttt ctgagacttt
 270401 tcttgttttt tatttttttg ggaattttga tccaaatttt ttgttaagatg
 270451 cccctctggt ggaattattg tctgatgttt ttccaatttt tgactggagc
 270501 gatgggtttt ggggagtgtg atctcagagg taaaaatgca ttttcatcc
 270551 atcataatcaa gggtagatgc ttgcagcatg atttctcaga gttgatattt
 270601 aacttgatca acagagcttg agctggctaa ttgaggtggt ggatcaaat
 270651 ttctccactg taaagttaact ctttttctcc catctccctg tatactcttc
 270701 ggaaaataaat cactataggt agcccacagt taaggagtgg ggaattatgc
 270751 tccccctcct taaatgtgga atatctacgt taattatttt tggaaatttt
 270801 ctgcagggga gatttatctc tctcttctct tccctgttta ttatttcagt
 270851 taatcattta tatcagcatg gactcatggc tatttatttt atactttttg
 270901 agttacaagc cagtactact ttatttattt tgtttttcaa atgtgcccg
 270951 gtttggtcat tgggagctct ttccagtggc tctttttttt cttttttttt
 271001 ttaagatggc gtctcactct gttgccaggt ttcatgtgca gcagcgcaat
 271051 cttggctcac tgcaacctct gccctctggg ttcaagcaat tctcttgct
 271101 cagcctcctg agtagctagg attacaggtg tgtgccgcca cgcccagcta
 271151 atttttgtat ttttagtaga gatgggggtt tcaccatatt ggccaggctg
 271201 gcttcgaact cctgacctca agtgcaccac ccgctcttag ctccc aaagc
 271251 gctgggatta caggcatgaa ccaccatgtc ctgctcagtt ggctcttggt
 271301 tccctttgat ataccgtcat cagtgtaggt attttttatt tgtctttgtt
 271351 ttatagcact tcccttttgg cactcgaaga ttgctctaga ttgctctcgt
 271401 atattttcta cgcactctag agtgagccat ttcttgaata acctgtcaat
 271451 atttttattg gaaaatggta ttgaaacca aggtctgaat gataggtgta
 271501 ttgttgttta ctggagtgct cttgtttata ggccctttca gctgcagag
 271551 caatgaagta tatatatata tactaactta tatatacaca acctatggct
 271601 ataaatattt ctatatgtaa ctgtttgtat ctgcccataa ctaaccatga
 271651 aattacgctg atgtttccaa ctctaacta ttaccacgtg gatcatttta
 271701 gtctctcac ctatatctga ttgtccactc ccaagtagta aaaacttagt
 271751 tcccatcacc caccatccat ttacttaatt gttcaattcc agtatatata
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 271901 gtaaacatgg caaaatcctg tcttactta aaaaaataa ataagtata
 271951 tacaagtggt cacacgcta tatgtaatcc cagctattcc agagctggg
 272001 gcattgataa tgcctgaacc caggaggcag atgttgcatg gagctgaagt
 272051 tgtgccactg tatgcagcc tgggtgacaa agcaagacta tctcaadata
 272101 aalaataaaa taaaataga attttaacc atccccagtt aggaataatc
 272151 ttatcaact agagtacagt aagtaagtaa gtatatgcag ttacttttgc
 272201 ctttattttt acagactcca ctcatttcca aagttactta ggtcagtaac
 272251 ttttccacc agcccttggt gaagtgttt atacatttgt aatacagtta
 272301 gattctcttc atagtctgca ttcttactg agatccctga cgtcctaata
 272351 gatttttaaa atttgcatac gttatttagt cattgtttac tctttaaatt
 272401 ctgtgggttt ttacaactgc ataatgtcat gcatcataa ttatagtaac
 272451 atacacaata gtttcggtgc ctttaacata gttgtaatgt atggattgtt

FIG. 1 CONT'D

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272501 atacagatca tagtactgat ttccaccaggc tgtgatctaa gccagtggtt
 272551 ctcaattttt tttttggctc caggatgact ttataactctt tagagtattt
 272601 aaaaccgcaa agagcttttg tttatgtggg taacatctgt tgactactac
 272651 tgtaatagaa atlgaaaccta agaagtttca aaaaatatta attggcttat
 272701 ttttaagaaa ataataaatc caacatgttg aaaaataaaa tagaaactat
 272751 tttctaagc aaaaatatta gtgagaagga taacatgtct ttaccttggt
 272801 agaaatatct ttaataactg gcttattaga ttctttatct tgcttctaca
 272851 ttacgtcttc tgtgttatat tactttgggt gaactgaata aaagacaagc
 272901 ttccacacaga cagggaagctg aagaaggaag agtattttca tagcctttca
 272951 tctaattgtg gatatttttc ttgttgactc ccaaaactca acaggttagtc
 273001 attccttaaa ggttagttgg agtgtggagt ctgacataic attgagtatt
 273051 tttacaatgt tacaftaaaa tccattggct tatcttgac ttgagttaga
 273101 tctttttacca tgtatgattt tacatgtatt gaccacttgt aaaaatttgg
 273151 ctacgtgaat tatgcagatc ttccaaatgt tgacacattt aatcatataa
 273201 ttttaaaatc acattttgta atatagctac tgatctcatt ttaaaagttg
 273251 ttaactcttc agaaaacttc aggtttgccca tggcagatac aaggttttca
 273301 aaattctcat ttctattctg tagcttgaat ttgttcatta gcaagaaata
 273351 ttgttagttt tgtccttcaa gtgataggct cactttgtct atatgccaaa
 273401 cactcaagtc ttgaaaacta cagtttttct agtggttctt ttaagcaaaa
 273451 atggttttca tttaaaaaaa aacaaaaaaa aactagatag tttagtttac
 273501 aagttgaaca atcccactag tatttttct tgaacagacc attgtactat
 273551 aatggctgta caaatgattg taataactta tgttgtttca ttaaaggttg
 273601 acttagatga aattgggtgt gaagatcaca atagtaagtg aactataact
 273651 tactgatagt ttgatgccac taacttgatt catgctaagt cactagcagt
 273701 tttactcacc agtgcctttg tactatcagt tgtcaatata ataaaaacag
 273751 caaatgtcct aattattttt tttaaatagt ttgtccttgt gtattctctg
 273801 aaatgatttg gggagttcta ggggtccaca gaccacattt tgctaattac
 273851 aggttcaaaag ataccttaga gttcctctag accaatacc taaagcccc
 273901 ttactacata tgtttctgtg tactgaggtc attatttaatg tatttggtaa
 273951 gtatttcata aataacttgc tcagaaatga attcagatca gttatttcca
 274001 tgagcattgt ctgttttcaa agactgtcta gagtggattt ggtagacata
 274051 gtataactat accatgtact tggcgtcctt cattacaagg ctgctacact
 274101 tcttgctcca tgggttatagt ctgccaatga atagtcaaaa ctgggctaaat
 274151 aaaaaagaga gtttgaacag ataataaagt taccagatgg tattcttcat
 274201 tctcgggggc aaatagcagc aatattagta tgcgtgaattg atcttcaatt
 274251 cagggtccctg ctccagttat ccttgtaaat atctctagt aaaaataacc
 274301 gaaatattta gttttagttt ataagtctga gcatgcatac aatgccgaaa
 274351 gaagtgaaga tcaggagcaa gaaactaaaa ttgtttgtat tggtagtaact
 274401 atgtctacag tcgaaaccaa agtctccagc atgtttcttg tgatactcat
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 274501 atcagaagaat ttggtttacct cttttcttat tactgtggtt aagggtctcc
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 274651 cataaggaaac aacatattta tttaaaacc agaacaata aatatgaatt
 274701 gcttagttac attcatttat tgtagaagca gattcagtat ttctcttgat
 274751 tggcttttgt tttttaaatt atattaccag tgcctttttt tttttcaaaa
 274801 tcattttcaa gattgatcat ttactctgtt tactttttaa ataaactatt
 274851 ttaagttagtt cctaccagaa taatttagta gcatgtattg gcatttctaa
 274901 gacttttttt ttttttttga aagagtctcg cctgtgtttt tattaactgg
 274951 ttccaagatt gagcatttac tctgtttact ttttaaatga ctcatittaa
 275001 gtatttcccta ccagaataat tttagtagcat gtgttggcat ttctaagct
 275051 tttttttttt aataactcat ttttaagtatt tcttaccaaa taatttagta
 275101 gcatgtattg gcatttctaa gactttttt tttttttttt gaaagagtc
 275151 ttgctctgtt acccaggctg gagtgcagtg gcgcaatctc aaccactgt
 275201 aacctccgct tcttaggttc gccaccaagc ccagctaact tttttgtgt
 275251 agctgggacc acatgcgtgt gccaccaagc ccagctaact tttttgtgt
 275301 tttggtagag atggggtttc accgtgttgg ccaggcatgt ctcaaacctc
 275351 tggcctcaag tgactcgtct gcctcagcct cccatgaggt ggtgtggcac

FIG. 1 CONT'D

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275401 cacacctagc ctctaaacaa attttaaatg ataaaaaa caaaaattca
275451 ttgagttctg attgttgtct ttccagatca cagctttttt ttcttcagtc
275501 caggacaaaa ttttatgtga ttccgaataa ctttaattgt accaaaaagt
275551 atttttaaat acttccaaaa tacttgaaaa tacttcaaaa tacatctcaa
275601 tgtccacctc taataaagat aaatccctag taagaggatg tgactcatat
275651 ctgtgaaggg aaacttaaca ataatctatg aagtgtcttg aaaaaaat
275701 ttgcctaaaa gtggtttttg ttgattatca gtgaaaaacc taatgatttc
275751 aggcaccctg agaaaagccct gcttcacaaa atattttctc cattaagctg
275801 attgttctct aaaaattccac agtgaaagat gaattccctt tgttcactgc
275851 agcctcgaa cctcgggctc aagcaatcct ctccgctcag cctcctgagt
275901 agctcggact acaggcatgt accacctcgc ctggctgatt ttttgtata
275951 gaggagggtc tgcattgtta cccaggctgg tcttgaactt ggccctcaat
276001 gattctcctg tctcgtctc ctaaagtgtc gggattacag gcctgagata
276051 ctgtgccacc ttgtttatct ccaatttata gatgtggta cacagttaat
276101 aaatgggtca gaactagtat tcaaacccaa ctacacttga actccaaagc
276151 ctaggttggt aatcaccact ctttttcttt ccttggcttc tgagatacta
276201 ctctcctggg ttctcttccc acctcagctct ctatagtccc ttttccctgt
276251 attgttgatg ttctacataa gaccttctt attctgtatg ttctccctat
276301 ggaattacat ctactctatg gcactcagca gtaattgtac gtaatgact
276351 ccaatttgta ttctgaaac agacttact ctagagccta tgcattccag
276401 ttgttcggag agcctcttac tacttgaatt tgcacactgt cctctactac
276451 ttattcatac ctaaatgaat agcattatg tccattatgat tgccctgaagg
276501 aaaaagttgg agatcattca tgaactctcc cactgtacc tgagtatct
276551 ttctgaaaaa cataactaat cacatcataa gatccttata cctctgggtt
276601 agctttccat ataaaagggt cttagcatgg cacatagggc ctctgatgtc
276651 atgcccctacc tgccttttaa gcaccagttc tcatccattt tgcctctta
276701 cattgtcctt gttaaaaatc ttgaaatttt gtttgagctg tgcattgggg
276751 aatlaaaagt aagcttagtc ttacatagta taccatcagtc cagagtatla
276801 gtatlaaaac aacacccctc cagaggccac tatgttgcca gcagcaactaa
276851 ctagccagaa gtcccccttg ggaagggtga ctttccagc aggaattgag
276901 actttgatac ctaagccctt tatgcagatt ctcccttctt tgccaaactt
276951 ggaggttctg ggtttaattt gtgttaggga aatgtatatt ttgtgagcc
277001 atctggactg tctactcatt aatcctccct gtgcctaact cagtgaacct
277051 tctaaaatgc aattattacg atgtcttccc ttgcttata ggccctatta
277101 gtttaattta aataatttta tacattgtaa cattgtataa atatgcttag
277151 cattttaggt atttttgtaa cttttaaacg cgaagtga ga tttagctttt
277201 gacaacttat aattgttttt cttatatatt caattttgaa aggaattgtt
277251 ctttaggaaa attttgaagt attagcttac tgggcctcag aaatgttggc
277301 tcatattatg aactttctct gtacaacttt aaacattaat ttgcttcagt
277351 caattaaaca tatagaagac ttttttaaaa agcagtaatt ttggacattt
277401 agttatttca gcagccattg agttgtctca ttctgaaacc acactcggtg
277451 gagattatac cactgagact tttlaaagtg catgtataat ctatacatat
277501 accccaacac cactctccag tgaagtcttc cttctgtttt ctagtcaaga
277551 aagtgtaact aaaaatttca atatatatt taaaaattaa cagaaaaggg
277601 taagataact agatcatatt gtttctagct ctttgaagg aaacattact
277651 aaaaattttt cctcaaggaa aatgatagac cagatgagtc ttgacttgtt
277701 ttgaaacca agtagattgt tctataacat gtcttagatg aaattatagt
277751 atttttctat tagctcttag gctagtcact tatttttatt ttgagcagtg
277801 caaaaacttt ctggatggag ctagaagatg atggaaaagt ggacttcaat
277851 ttgaaacaag tacaataatg gctgcagta cgtgaaacaa agatcaaaga
277901 tgggtctgcc accaataaag gtatgaagca ataaaaactt tgaatagtgt
277951 taatactaaa tatttctctc tgacagtaca gtatcattct atttccaata
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278101 ttgggggaat gttgcaaaag taacactcgc tcattatata acatttgcca
278151 ctatagaaa aatatacaaa ggaanaatta ttccacattc agagacaact
278201 agtttttcta tatgtatgtg taaaagtaca tataacttta ttttgcttgc
278251 tttaacaga acttactcta ccagctctct gaaagcaaaa ttgtgttct

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FIG. 1 CONT'D

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278301 acataggcag ttagttcagt aatccaagtt tttatttttt ctatttggtt
278351 gttgtcaacc ctggttggtt gtagaacgta agacttgaag atgaaatcct
278401 ccttcaatcc atcaggacat acggttttga agcaaatitt tctccagatt
278451 atttttagta ctttctggat ggcttlatga cattattatt atgtgtttat
278501 caaaaaaat tggcactgtt ttctatttta atcttccctg tcaatccttc
278551 atgagtcaga taaatctaga tcttaactca gttgtactac tctttagctg
278601 aatgtcctgg aataaatagc ttaacctctg agcctcagtt tctttgtctg
278651 ctaatgcaga tagtcttatt aacctctcag aggaatagtg aagattaaat
278701 gagataaat atgtaaattg tttagcacag tagctggcac cataaataaa
278751 ggtaatggtg atgctgtttt tctgtcttta acagaatata tccaagcaat
278801 gattctagtg aatgaagcaa ctataattaa cagttcaaca tcaataaagg
278851 gtatgtacat ctctattccc attgtagagt attctctgal atttcttgc
278901 calgaagcag gatagcttta alalgttggy ctaattaaag ataatttaaa
278951 ataaaaacta acatccacat ttctaagtta cataaatcac agtttccctc
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279051 aagcagccta ggaagaagat taacaaatgt gtgtcgtctt tgggggaaaa
279101 aaagactttc ttatataaag agggcaaat a gaattctaac tttaaaacac
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279401 attctaaat ttaattcagt tctgacacta ctaccacagag tttagcacga
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279751 accacccctc cagtatgtag atacattcac cagttctgaa gctctctgaa
279801 cctgttgtt caggggtttt gtggaggctc cattacatag gcatgatcca
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280051 gacactctta tcaactactg agattccaag ggtctcagaa gttcttatgt
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280251 aeaagaaaaa ctgagaagtt attttaacag gatcaatcac cattccataa
280301 atctttagtc gtacacattg ctgaagtttt aaggaagtac aatatattact
280351 aggtttgtat taatgctgtt agatgtgttc aataaatgtc aataattttt
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280851 acccggtgat ttttttttt ttgtatttag tagagggagg gtttccacat
280901 gttgcccaga ctggtcacga actcctgagc tcaggcaaac tgctgcttc
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281051 accttgggt gaataacaga ggaatcttat tgaagtcaat cacagccagc
281101 agacttaaca tccaaaaact tggccagaaa caaagacagc acttgacttt
281151 tetacacaa ggggtgggct agcctgaaac aagcttacag tggcatgaag
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FIG. 1 CONT'D

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281201 cgtagtggca tgaagggtg cagaggcaga acaaagacag ttaatacaat
281251 tgtgacaggt tcataactca gcattacacg ttgtctatgc agcccagatg
281301 tctgttatct aggtttttct ctagtgccta gcacagctta ttccatgacc
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281651 ggaaagctta ttctctcttt taattttatt ttctttcttt taattccctg
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281901 ctgctctccc gattatagat aaatcattcc tggttagta aacttctggg
281951 aggggattta tgacaattga gtttcttttt gggaggaatc atttttagac
282001 agataaggga actccagaga caacttcttc ctgtatttgt tcattctcac
282051 atgtcttcaa ttcaaaataa tctttatggt actatatctc atctggacaa
282101 tccttaaggc attatattta tttttgcaag agagaggctt ttaacctcac
282151 ttgttaccaa gaataatggc aacactaat tctaaacatt tcttttcttt
282201 ctgaagaacc tttttttccg taaaaagtaa gtgggttttt gtttgggggt
282251 ttttaaggaa ataattttct caatagaatc gccgaattat ataatttcat
282301 atttttatgt agttgggtcca tctgaatgt acaaatgca tcaagataag
282351 agtatattta ttgtctagca gtgaagtgtt tttaagttaa cagltggggg
282401 gagttatgta actgacactg ttggcaaatg taaggattga aaacctttgg
282451 taataaaggc tcatgtgggc tgaatacagt ggcctcaggcc tgaatccaa
282501 gcactttagg aggcctgagc gggaggatca cctgagccca ggaatttgag
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282601 aaaattagtt ggctgtgggt gtgtgtgctt gtgattccag gtactcaaga
282651 ggctgcagtg ggaggatcgc tcgagccacg gaaatcaagt ctgcagttag
282701 ctgggatcac actactgtac tccaaccttc cagcctaggc aagagagtga
282751 gacctgtctt aaaaaaaaaa aaaagtttca cgcctagcatt tattttaaaa
282801 agaaggttgg gaatgagaga acaaaagaa ctttgtgttg aggtcaaaac
282851 aagctgtctc ggaatccaac tagactcccc aggcgtgtcat caaacgccta
282901 attatgttta ttttctctga tgttgtgtaa ctctcagtat ttgctctgtc
282951 tccatatgaa ggactggata gtgttttctt gagagaaatt atttcccttt
283001 cctctttttt ctaatgacta atgttaaact ctcatgtttt tgagtaaatc
283051 ctattttocaa ctatgcttga tatacatttg ttttgtcat atttgttaat
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283151 actcttatta ttgtgaaaat taatttctaa tcagttatag ctgtgaacca
283201 aaaaataatca aaagggctag aatctaattt tttttttttt tgagcgaagg
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283301 tacaacttcc gcctcccggt ttcaagcgat tctcctgctc cagcctctcg
283351 agtagctggg attataggca cctgccacca cacctggcta atttttgtgt
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283651 ggcaaaacag aggtgttga cactgttga ttacactcta agtgggttgt
283701 acatacagat atttgattgg ggttaacagtc acaagggtct ctttctccat
283751 caaacattct gtgtgaaaca ataaagaata gggagctctg actgggctgt
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283851 gtgtctcagg cctataatcc agaccagcca ggcctgaggt agagattcta
283901 cacttgagtc caggagttca aaatcagtcg ggtgtggagt tgccacactg
283951 cctctacaaa agaattttta aaatcagtcg ggtgtggagt tgagcctagg
284001 tagttctagc tactctggag gctgaagtg aagggtagct tgagcctagg
284051 agttcaaggt cacagtgagc ttatgatcac atcaacgtac tccagcctgg

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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284101 gtgacagagc aagacctgtt gtctttaaaa aaaaaaaaaa aatgtggagt
284151 ctagttaatg tgaacatctt caacacagaa gtccagaaagc aatggtcaltg
284201 caccaaaagaa aaaaacatca tgttacatga gtccctcttc agggcttaac
284251 ttttcccttt ggcataataa atttggaaag tcctaaattt ttattttctt
284301 ttacatagc tctcttcaac tatcagactt ttattttctt attttttt
284351 gagagaggggt ctctcttgtt cgctcaggctt ggaagtgcagt ggtgcaagta
284401 tagctcacta cagcctaagg ttctctgggtt taagcagtgt ttccacctca
284451 gttcctaaat agctagaact acaggcatgc gccaccatgc ctgggttaact
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284551 tcagggggggc cttaaaactcc tggcctcaag taactctccc acctttatctt
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284651 agattttttaa cctttcttta cltgaaaat taaagacaga tatttgtttt
284701 tcagttagcc aaggagcaac ctggaatac aatatccttt tattaacctt
284751 cttttgaggg ggaagtaag ttataatttt ttatttagaa aataaataa
284801 ctgggcccagg catgggtggtt catacctgta atccccgcc tttgggaggc
284851 ccaggtgcac ggaactactt aggtcaggag ttccagatca gcctggccaa
284901 cataaaactc tgtctctact aaaactacaa aaattagccc agcatggttt
284951 tgcattcgct taatcccaac tactggagag gctgcggcag gagaatcgtt
285001 tgaacctagg aggttagaggt tgcagtgagc caagatcata ccactgcact
285051 ccacctggg cgacagagtg aatgagactt tgtctcaaaa aaaaagaatt
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285151 aatagttgta gacaaatagg aaaaacaaag gtacataaatt ttttcathtt
285201 ctgactttta tagagccttt aagaattatg tgatttctct ataaaatgca
285251 tgcagaagta gggataacta atgtccacct taaagatttg ttaagcttca
285301 aatcaagttc agggcaaaact agagtttcta cagttagaaat ctlttctgtc
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285401 atcttttgcc tcaatcttga aaccttacta tgtttgcmaa tttttgggat
285451 ccatatgggc agactctagt caatgaacat attacttggg tacttatagc
285501 aaatgggttt taacttggtt tatittgttg tcaactattt tttttgtgta
285551 gatcctatgc ctgtgaacta gaaggaaacag gaaaacaaat ccaattgcatt
285601 tccctctaca tcatgtgaaa actcctttcc agaagactgt acatttctgt
285651 atgtatataa atcttttgtt attaagtctt ttgctcctac agattttctc
285701 ttataaaact acttgacatt agaatagatg aaatatacaa aaaaattttt
285751 cccattaaag cttaaaaagt tgtatatltt agtatltttat gtaagataga
285801 attttcaltg tctctgaata ggttattgaa tatctctagt taatcaagtc
285851 tttttataaa gtttagctta agatgtcttt gtgtatttta ttaatacact
285901 gaaactctacc aagtagtgtt tttttgtttt gttttgtttt ttgttttact
285951 gcttagatta tctggagaat taaaagtgtt caaaaatttt ctctcagtat
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286151 ctagatactc tgacacgtag tctttatttt tagtaggttaa tacttgggccc
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286251 agagaacata gtttcaaaaa acaagaagt atctttagaa agaaacttct
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286351 gaaaaactat ataattattt ttttgatttt catcgctgtg agagttgtag
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286501 cagagaagc taagtcca cttagctcc ttaattggcc atttcaglgt
286551 ctcaaaaac attttttttt ctgaaattc tgaccttga atatacagtg
286601 taaaattttg taagttttta ggaacaaatt cactcagctt aacttaaat
286651 taaattttca tgaataatc caccacaaac gctctctacc aaacagttat
286701 ctatatattt agatatatta ttttaaaact aaatgcagga gtggtttatt
286751 cctgtgaagt atcatttttt gcttttaagt catataacca gcttatcaga
286801 atctttttga attttggaa atttttgtc ccttttagct tatcatctg
286851 tacaataaaa taagctttct aatcttcat atgtgcactg aaaaacaatt
286901 tgaacaggac atgaccaag ataaaaacct tgtggtggc tcaactag
286951 acatttcttt tatttacgctt cagaagaac gctttaagca actgtgaatt

FIG. 1 CONTD

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287001 tacttctact gttgtccgcg ctacacttct cacttacaaa gtggctcatga
287051 aaaatcaagg ttcaactgcc tagcattctg tggcatctgc agacattatt
287101 cagacttatt gaaaacgttg tcaaaaaaga aaatcagtt aatttggatt
287151 ttctccacct acttggttaac tcagcaccta gtgttggttg gccttttaaa
287201 ttcaaaaat ttagaagcca cacccttgat gccttctct agagattttt
287251 aagagaccag tgttaagcta acccttctat atttcttgta gcctgtccct
287301 ctctcccttt taaaaatcag ggcagctaga acttggagat aagtggtcaa
287351 agaaaaaatc agggcagtat tattttatt tttaattttc tatatttgaa
287401 gttttttttt ccagaccttg agatttaatt tgtagagctc tctatatgct
287451 taaataaact tgagttctag taccctctct ttaactgtca cagacttcag
287501 ttctctttta ttttttctct ctgttttcca acttgagagc catacttaaa
287551 gatggaaaaa acaaaaggag aattgttttt gagaaactct tccttctctt
287601 tgttatcagt taaccttatt ttctcctaa cagattatt tcttgttcta
287651 agcatagctt tagttgtttt ttgttgttgt tattttatta gcacttttgg
287701 aaacctcggt tcttactagg ctttgtgata cttttcttac agtttcgtac
287751 caatgttcgc tatcataact tagctgtctt cttttgtatg tatactttta
287801 aaaaatccgag cttccaagaa aaattgagtt ggtttcttta actgttttcc
287851 catctcttta ggactgttta tgattatata atcagaactt catttcccta
287901 atctcccatc tctcttgtaac tgtgttgaca ctcagaggct ttttttgaga
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288001 acatgtctta ttaggcttag gattttcttc ctttgcatt aagaattcca
288051 aggaagcatt tcaittctga ctggaattat gtttaaaaa ttctctttat
288101 atttctctg caggccagaa gtttatttgc ttattttatt ttcagtaact
288151 aaacctctct agcagccag ttgtcacata ggttgctag taaactaaac
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288301 tgaggcagga ggaactcttg agcccaaaat ttcaagacta gcttggggca
288351 catggcaaaa cccatctctt acaaaaagta acaaaaat ta gccgggcttg
288401 gtggcacatg cctgtggtcc cagctacttg ggaggctgag gtgtatcacc
288451 taagtccaga agatcaaggc tgcagcaagc catgatcgcg cctccgact
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288751 aagctcaagc gatccttctt cctcagactc tcaagttagct aggactacag
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289451 gaacttaaaa gtcaataact aaggtcaggg ttgacacagt ctcaactcta
289501 cttctctctg ttaccagtag gtttcttctc ttcccacagt accaaaata
289551 gctgccccag ctaaaactcta acccttctagt gcaagtgtta tctcatgtga
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289651 gtctagtcat gttgccagg ctgattctga tctctgggc tcaatgaatc
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289751 acccaacctt tttttttaat atcttaattt aaattattga aagagacagt
289801 ataaaaagcc cagtatgtat acaagaccca acatcttga gtacactgaa
289851 attaatatac ctgcctttca gaagaggat actaaagaag ggaactgagca

FIG. 1 CONT'D

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289901 aaataccaga tttaacctact gcagctcttta gatgaataga gtatacatcc
289951 ttgttttaaa atatgcccc tttaattggtca tagaggaatag aatgactttct
290001 tactttagcc ttgcacaaaag ctagataatc agttggcagc ctctaagcca
290051 tgctccactt tgaigtctcag agtgactaac aacaccctga acaattgtcca
290101 aatcatatgc aaactgagaa atccttacc agaggctggc aagcaggtcc
290151 agacagccgt ggacttctcc ttctcactac ttactcctta tctgtgtttt
290201 acctctagca ctttttaacta atgactgggt ttacaatact gtgcatagaa
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290351 acttaagact tgtaagttgg gtttttctct ttcttttagt aaaaagaagc
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290601 ttttaactag ttggcttctc ttgaaatgta aattccaaat tacaagtttt
290651 accagcatat ttactattac aaattttagt cctaagtagt tctaattgta
290701 tttgttccca tgaigtggcta acttggagtt gtatttgttg tgtcatatga
290751 ggaaattatg taaaggacat taaactacta ttcaaatatt agtagttact
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290901 ttaattgttc ccttctccca aagagcaaaa caggaaacca aaaaattcata
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291301 tactacagaa tccagtttga aacatattta ttgggttaag tcaagttgaa
291351 aaggacaaca gaacagttta ctatctctat aaatctgtaa gtgtataagt
291401 aacttgagag tgaagtaacct atatacaaaa aagaacaagc gccatgagaa
291451 cctaaggaaat gtattacagt gaattctgaa tgaaagaaaa taggggtgtt
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291551 aattccttat aagaaaaaagt ggttaagaag aacttgacac ctaataatag
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292751 gtttaattgga ctataccagtt ccacatggct ggagaggcct cacactcatg

FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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294251 aagtcatgac tgcctcgggt ctgtctgtag gaaaatgcca ctgaacttga
294301 agggagaaaa cccctcgcag ctgccaatca aatgtcactt ccaaagacga
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294501 tatgttcagt tggctcggaa ttacccaaag caaaaagaag ttgtttctga
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294851 ttgtggccca cgtgtgtaat cccagcactt ttgggagacc gagtgggagg
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294951 ccatcttaac aaaaaattta aaaattagct gggatgggt gtgtgcact
295001 atagtccagc ctactctgga ggctggggtg ggaatctgc ttgagccag
295051 gaggtcaagg atgcagtgag ctgtgatac acactgtacc agagccttg
295101 acaacaaagc aagacctgtg ctccaaaaa taataataaa aataaaagc
295151 tctacaatgg gaaaatgaac tctgtcacta gcatagggaa aaaaacctc
295201 taattatttg ccaaatatgg taatttgaaa catttcttcc aagaatgcat
295251 atttcttta atctagtact aatacattaa aagataatca atggcattac
295301 aacaaatgat atttaacagt gccagacact gtgacaagta cttcacattc
295351 attctcttaa tcttccaaaa aacctatgag gtataggtaa tatctcagt
295401 ttatacatga ggaagtggag cctcagagaa gtcaatttg agaggtcata
295451 gaacaaatg tagagacagg atttgaaccc atgttcttaa ccattggtt
295501 atatgttgca ttttactttt aaaaactatt tctcgcttaa tgtgatgct
295551 ataactagta ttttcttaat catagaaatg tattaacatc ccatgaaaaa
295601 atgaaaacat gttctaatat ataagactt tgaaaaacat ttaagggtg
295651 tgtagtacac atacattcgt aggtatacag atgtagagtg gtgttgcat
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FIG. 1 CONTD

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295701 atatgtacct ttaatttaac gcaaaatttag ctaccccatc ttggcaaaaa
295751 aagaataaga gaatgataa taatttaaat agtataaala tagttttcac
295801 catcctctaa gltaattgga gtgtaaaatg agagctatat ctactgttac
295851 ctacagtttgg ctacagttcct tgaggccctct catagaggaa acctctccat
295901 gtgctgtttt attctgttta aaaatatgta ttttattttg taagatttac
295951 ctctaaatgt aaccacaacta cctcatctgg ggaattggct ctctcaaggga
296001 atagaaaacag gtacctgcac aagactagga actagccagc tatctccagc
296051 ggcctggaaat tgtatttaat aaacacctgt taacagctgt aaaaccaatg
296101 gggtcagagc caaagcgttg gagaaagcac ccaatgtaga gcagcacaca
296151 ggactaaacc ccacagaagg tatgatttca aacaaacatt tacagcacac
296201 aaagatgttt aggaccatga aggcagcatg agtcccagca agtagagaga
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296651 aatacctaata ccagtagaaa agttaaagg aattaactag atttgtatat
296701 agcatggatg ggtctcaaaa acattatat ttgaacaaca aaagcaagat
296751 tatagaataa tacctatagt aaatttttta taatgaaaaa tacacaatat
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296851 atctcttgag agtttaagtt tatctatgtt ttaactttta acttttttta
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296951 atatacaggg aagagaacta gacaaaaatg tgacaactaa ttctggatgg
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297051 ttgacacaca aaatcacatg ggaagaacaa attatagatt ttcatatctg
297101 taacagaaat ccaataatgt gaatttgttg atttgtgtcg ttgttctttt
297151 cttctgcaaa cagcagccac cttctgtatg tgtattaatt aatacagaaa
297201 atacagaaga gaatcataga ggaaaagacc taaagtcaac ttgttcagca
297251 aaggagacta agatccagag atttttaacca gctcaccagc agtcatttac
297301 ctagtctaac agctagagtc cccaagtctc ttaactttga tcaaatatg
297351 gttccctatc aagttagtta gtcatctgaa tagagggaaa agtacctgaa
297401 gttttatggt tgcaagcttc ctgctctgca acaglatgaa aaaaggattc
297451 aataaatgta ggcagatacc cggcatcaat ctccccagtc tgttctgtc
297501 actggagtga gagagaactt aagacatctg caaaactatg tcttacaaaa
297551 tttagacatat ttaagtttat ccaattgtaa agagcagaa tagcagaatt
297601 ctcaaaaaca agcttctgtg ctgaacaggg aaattaaagg aattgatttt
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297701 gtgcagttta taattattta taaacttttg ggaggtattg tcttccaagg
297751 agatctattt agggaaaaag ctgatagtgt tcatgagcca aactattcta
297801 aatgctatta catcttttat tacatcattt acacatttat caagcagctc
297851 tcttgacttg acttgctgct tttctattct ttctccatcc attgctgccc
297901 ttttagaaca aaatgtgcat gtcttcaact gacagcaggg aatgccaaaa
297951 ctctcccctt gtcaagtgc aaaaatacca ctggatataa atataaaaga
298001 ctacagagac agattcctac tgggttaagg accttgaggg tttgttgca
298051 ggtgtgtata tctttgaagg tgggtacttt ttattgtgt ccaaatctt
298101 atagatgtta aatctggttt aattgglttc laaaccaaa aatclaaalt
298151 attaaaggaat aaaaacctg tgattgttct gtggaaaagg lagtcagaga
298201 caacacatac atcatgaga gtgtacttga acactcatct gctttgagtc
298251 tggctcttacc cctctagta tcagcctact ttgggcagcc atttctcgt
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298351 tcaaggtact gactcaacta attcttcaca agcagcccta tgagggaggt
298401 attgtcatat aatccccatt ttaaaaatgt gaagataaag cacagaaaag
298451 ttaataaact catccaagat aatacagcta gtaaatgtgg aagctgtgat
298501 gggaaacccag gcactctacc tctaagagct ttacatttta gctgtcttc
298551 ctacagtagtt atcagttgca gtaaggtgtc aataaactgc tttttgagat
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FIG. 1 CONT'D

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298601 gctctgatttt cttcttttgc tattttgttg acagcattta tgaatgcagc
298651 ctttttgctca aatgtaatcg acaatttgtgt caaaaccgag ttgtcccaaca
298701 tggctctcaaa gtgaggtttac aggtgttccaa aactgagcag aagggatggg
298751 gtgtacgcgtg tctagatgac attgacagag ggacatttgt ttgcattttat
298801 tcagggtaaag caaaagttta ttttcaaaat attctagagt tgaatccact
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298951 gggaactctga gcactaaaga gatgagatgc tttaggaggtt ctttcttcaa
299001 gaaaagaaag gttcagagat gacacttggg tttttgtgtg agggcctgtt
299051 acgtacaagg caccatttgt ttgtctgcac ggctacaggt accttggggt
299101 aagggaataa aacttgttaa aagtaaaaaa aaaaactaaa tgactggctt
299151 gccaaagtaa agatgaccag tcaaaaactt tcattatcaa tgttttgagc
299201 tattattaga atttaacaag ttaattatgt aatatctgca tgttataatt
299251 cagtcagtga ctttaggcaa ctcaactctat tttagggact gcagagagtt
299301 gtccatgctg cagagcaaaa cttcccagagc agtgtgttac agtcatgcaa
299351 ttactgattc tttagggcca cagccccagc ggccaaacac atcagcttcc
299401 agtagtctta cacatttacc tccagcatgt caggcaaaat ccttatttt
299451 ctgtgcacat ccttctgtga actaagtttgg gaaacacgagc tttagagcca
299501 gtctaaagga attgtccttg actattttta gcagttagcg atcaggggaa
299551 agaacaacca gggtctgaaa attactcatc tgaaaaaatca ggtttaactc
299601 gttttacatga ccatgtgctt agaaaagaaa tatcaggttc acatcagugga
299651 gggcaagaaag aagcttgcag agttcagagt agtcaacggt atggatccct
299701 gccactcccc atttacagat ccaacttcta cacactctgc ctgacagtcc
299751 atctctcata ctttcaaaaa taactcttgg atgaaaagcta cctgtaaaat
299801 gccaggtggt gtccaggaag tatcatttgt ttatctgttg ttgtctggaa
299851 atgtaactaa gatattgtct cgaatcaaca atgggttaaga atatcctgct
299901 attaatittg acttggcaac tataaatattg aatcccttga aagaaaatgt
299951 atgaacttta gaccaagatt tttagtgttt gcagaaacta atatgacaac
300001 actaagaaca tatcaccaca tatttaaata ggtacttttg ttaaaaaatt
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300501 aatatatttt tcaaaaaaga ggaatttaga agttgcattg tcagattgtg
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300601 actgagaagt gtccaccaaa gttcagtaat aatcccaagg agcttactgt
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301101 agaatgaaga gaatttttag tgatacagaa taactttttt ttcttttta
301151 gggaacagaa atatgataat atttcaagaa ttcaatatca ttcagttatt
301201 agagatcctg attccaagac agccattttt caacacaatg ggaaaaaaat
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301301 tttttttttt tttttttttt tttttttttt ttttgacgca gagtctcaat
301351 ctgtcaccaca ggctggagtg tgggtgcaca gtcacagctc actgcagcca
301401 caatctcctg ggctcgagta tctctctccc tcagctctcc gaatggctgg
301451 gactacaggt gcaaccacac atgccagctc ctattttagt agagatgggg

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FIG. 1 CONT'D

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301501 tctcactata ttgccacgce tgggtctccaa ctctcgagct ctgacgagctg
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301601 cccagctgct gggggcccttc tgagatgtaa actattgcct tctatcctt
301651 tactttagctc aaaaatgttg ttgtacttta tagtgtgtag aaattctcttt
301701 attgttttgg aatggtggac ggtggaatg ctaggaccat gtctgttta
301751 cttagtatca tccacggcag ttgacatglt tccagcttgg ctgtatgagg
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301901 gatatataag aaaagggaca aagtaattta ggtgaaggag aacaaggttt
301951 ttgttttttg tttgtttttg ttttgagatg gagtttcacl ctgtgtgcc
302001 aggcctggagt gcaatggcac gatctcagct tatgtcaacc tctgctcct
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302201 acccactttg gctcccgaat gtgctgggat tagagcgctg agccactgcg
302251 cctggctgaa ggttttaaga tgtatgagaa agaagagatg caattttatg
302301 aaagaatcat ccagaaaaaa attagtttatg tggtagcctc tgagggtacc
302351 clttgcattg tgaactaaag attagtacga gactgaacgc tagaagcaga
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302601 tgcctggctg tagctgggtg gtacltccat acatacattt cttttatctg
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302751 attcacatgc tgagaacttt catagttaata atatggtcaa tgtgtatga
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302851 agttatcatt actacttaaa gtgactgcag tgtctacaat gtgtaagcat
302901 tatcacattc gttaaacttt ctttgaagta gaaactagcc aatgagtgtt
302951 ttctatcttt acacaactta cagttgaagg caaatttata atctagtaat
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303151 ttttgactcc attagttcaa agactcctta tgatatcagc tttaggctt
303201 ttcaaaacga atctagtaca tatagcctat gatgattgac acttgatgaa
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303401 gggagcacia agtaggcttt gtttctctg tgaatgccta cctctctgct
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304301 gcctttaaaa ataaacacac atcaacttcc tgcaattgce tagcaaatc
304351 tgccgcagag cataactcag ttgactctgg caaaaggcta aaattattgc

FIG. 1 CONTD

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304401 accctgagtc cttgtgtttc agagttacta gtccttgcca tagttaatat
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304551 cactgtgttc tcttcccccc tgccaaccca gctctccacc taatattaaa
304601 ggaatggagat tggaggagac atggcagttc cttgatagaa aaggtctatc
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305101 gtaccttcca attcctgggc tcaaacagtc ctccacctc agtctcctga
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305351 ctcaaaaat tattttccct attgataaag aaaaacgatt aaqcagtgca
305401 tctgtcttta aaggattatt gtttcaaaq gtgtaattat tgaattgtca
305451 tctagtaaaa caccaaacac taatatgtgc aaaccccta gcaatacagt
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305651 tcagtttatt atgagtaaqg attaaatata ataatgaaga agcaaatgt
305701 agactcataa aaaggcattg ttacgtagta gaaagaaggc agactttggg
305751 attcaaacat tcttaggttt gttaccccaq ttctcgttat tgtgggtcag
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306951 tgatgaatgt gtggagatgg cggctagtgg gcaacagagc aatactggaa
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307151 catcttcata ttaaacctac ttgtgaaaa cttttgtttt aaaaaaaaaa
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307251 tccacctctc ctctgtaggt catcatattt attctttttt tttttttttt
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FIG. 1 CONT'D

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307401 agccctcctga gtacgtgaga ttacagggtg gaaccaccat gccctggctaa
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307801 ctaaaaatac aaaaaaaatt agccgtgtgt catggcacat gccataatc
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307951 gagtgagact ccgtctcaaa aaaaaaaaaa aaaaaaaaaa tcttgtgcca
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308051 ttgtttatag ctgcatagaa tctctattgt taccaaagt ttttaacca
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308201 ggaatacaat tctagatatt agattgcaga atcaaaagac aaatgcattt
308251 ataataatga taaattattga catattttat agggatttgt cccatttttg
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308701 gagggcaagg tggggagact gcttgagctc aggagtttaa gaccagccag
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308801 caggttttgt ggccaagctac tcaaggagct ggggtaggag gatcacttga
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309001 cctgaaattt tgactcttat tcccatttag aatgaatgcc tgaaagggct
309051 gaagatatca ggtatcaccc agttccactc gggataaagt atgcagagtg
309101 ctacataatc tttaattcag agctattccc cagctacttc cacactgcag
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309201 atattgtagt gttcctctct acttaacatt ttagtagatt tgaaataaaa
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309301 gtgagagaac agatcatatt tttaggatgt gttaatgtta atatgaaat
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309451 gattatggct atgaagctgg gactgtgcct gagaaggaaa tcttctgcca
309501 atgtgggggt aataaatgta gaaaaaaaat attataaata tgtaactaac
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309751 taactttacat gagtaggat gaagtgtata ttttatatga aataccactg
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FIG. 1 CONT'D

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310201 aacagatagg agaagagggga atagaaacct ggaggaacct gaatatTTTT
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310301 acgttgctta tttaggcagc aagtaattgt actgggcaaa aatttcaactt
310351 aaaaaacaca agaagtcacg gtaatggtgc tcagacctgt aatccagcca
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310451 agcttgggca acatgtcaaa accctgtctc tacaaaaaat acaaaaaatta
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310701 aaacagcccc ttggtatctc ctgggcatga ttgcaaatc tttttttttt
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310851 accagacagc taggaaaagg agcaaaaacat agcccaagca cctacagatg
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310951 gcaatgcact aaaaatgaaat gggggaaaaa agcttgatca gatatgggac
311001 catttttgtg caaaagggaa tattatggat cagccgatat ttctttgagc
311051 tctgacctgt gagtccattt gacctttaga aatatgaggt attctgtcac
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311201 gtctcttatg tgggactctg ttccagttag atgccattat ttctcttttc
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311751 cttttctcct aaccttccgc tctgtctctc tgcaggacc ttttccatgg
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312951 acggggtttc accatgttga ccaggctgtg ctcgaaactcc tgacctgtgt
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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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313201 tgttttgaga cggagtccecg ctctgtagcc caggctggag tgtagtggcg
313251 cgatctcggc tcaactgcaag ccccgctccc cgattcaagc gatttctcatg
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313351 ctaatttttg tattttttag agagacgggg ttccaccatg ttgggttaggc
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313701 gtccgcggccc cggcccgaga ggggtgctcg cgcagcagc cgggaggccc
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315851 agtagtagga catagttagt actcattaaa tattaaataa tagtaagtcc
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315951 agcttgactt ctgtaggtga tggggaataa tgagcagatg tccatttcag

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FIG. 1 CONTD

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316651 gtatgataaa gcaggaaaac cagactcaca gaccccccaga gcattggtac
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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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321401 ttttttgggt tttttgttg ttgtttgtg tctgttttga gacagagcct
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321651 atccaccacac ctacgctccc cgaagttctg ggaattatagg cgtgagccac
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321751 cagtgatata tgtggctcac atttgtgtct tgtataatgt tcttgttggt

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FIG. 1 CONT'D

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323101 gagacagaga agagatctgg ataacagaag agacttagg atcactaa
323151 cagttacctt cctctaaatt gaaaactttt cccattaaat ggtaaaaaa
323201 atctttcttt caaaactaaa atttgaaaaa tataaataaa agctgttttc
323251 tactacagaa aatcaagga agtaagagga tgaaccttgc aatgggcaa
323301 aaaaatttaa acgaattctt gtggccaaat agcaaataac cagttcaaaa
323351 accttgccctc ttactgacac atgggtggag atctcaacag ctggctttct
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324551 ggtttgagct tttaggtgaa gatgtgggag catttctttt ttttttttt
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324651 ggcgaattct gaataactgc aagctccgct tccgggttc acgcattct

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FIG. 1 CONT'D

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324851 ccaaaagctc gggattacag gtglagacca ccacgcccg ggcctgggagc
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325001 agatttatcc atgttggtaa acatagctct aagtccttca ttttaaatat
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327451 ctccccctta ccttctctcg tgattgtgag gccctccacc ccatgtggaa
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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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FIG. 1 CONT'D

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346751 ttcatcatct tcaaaacaga cactaaaatt taaaattgga ctctgaataa
346801 gaacattatc gggagtatgc aagaatgaaa aaaaaaattg acagttacat
346851 ttttctcaat ctaatatcag attctggttt ttatgcccac acatcacagt
346901 ctgacccctg aaaacttaac attcaccagt ctcatTTTTT accatggtae
346951 tctgattttc aataatgctg cgtctcaaaa tgggttttaa ctgagctccc
347001 aagcatgggt tctgcacatg aataaataag tactggaaaa atatttgcag
347051 gagatgaaaa agaacagctc attccagttg taatggcagc cctagccata
347101 gttcttatat cttagggaca aaactcaaac cagtgagatt caaatccggc
347151 cgcacatcag aatcatgtgg ggcactttaa aaactacaga agtgaagacc
347201 ccatccaaca cctctggaac agatttccgc tagtctagat gattattgat
347251 tactgtagct tcagcttctc atoctgata taagctctag caaagttttt
347301 ggttgttgtt ttgttttgtt taagacggag tctcactttg ttgcaggct
347351 ggagtgcagt ggtgtgatct cggctcactg caacctctgc ctctaggtt
347401 caagcgattc tctcgectca gcctccaag tagctgggac tacaggcgg
347451 caccacatg cccagctaat ttttgtattt ttagttaga tggggtttca
347501 ccatgttggc caggatggtc tcatctctt gacctcgtga tctgctgcc
347551 tggcgtctccc aaagtgtgct gattacaggc gtgagccacc acgcccagtc
347601 atcttagcaa agtttatctg actaatcatt ctgatgtcat gatctttatt
347651 taaaaaaaaa aacctttgtc cccactttta ctttcaagt ttacctgtga
347701 ctcacacagc atgtaactgt gcacctgga gcacctgtg ttgttgccc
347751 atgaggctgg ctactgggca aaccggagta tgggttcaat agcggagacc
347801 gagtatgaac ttacgtatg tcaactactg aaaacttgaa tccgattatt
347851 taactcgaga atgtctgtgc ctaccttatg ggacaaaaa tggacaagta

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FIG. 1 CONT'D

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347901 agtaaaaatgt gaagcagaga gcacaaatgtc tggcactatg ggaataaataat
347951 gttaaaacac acccatgcac gcacacactc cccttgctaa cattctctgt
348001 ttattttctc cattctaac ccacttaact atgataagct ctggaaggct
348051 cattagcccc catctcttgt gccctctttt gttttggaga tgagctaaaa
348101 ggacacttta tattttcccc tatccaacac aagcgttatt ttcagaacaa
348151 ctaactgctt gtcattgtaa cccathtaac tgtattagtc cgtttccaca
348201 ctggtatgaa gaaataccag agactgggta atttataag gaacacaggt
348251 taatggactc agttccgcat ggctggggag gtctcaagaa acctacaatt
348301 gtggcggaaa ggggaagagc ccgtcttacc tagtggcaag taagtgaag
348351 cagcgaagc ccagggggaa ctgccattta taaaccatc agatctcata
348401 agaactccct caatagcatg agaacagcat ggggaaaccg ccccataat
348451 ccaatcacct cccaacaggt ctccctcaac aactgaggat tacaattcaa
348501 gataagttgg gtggggacac agagccaaac cacatcatcc tatttggtt
348551 tctctcactg actgttatga aaagctcttt ataagtatct cattgtgttg
348601 ttaattccta aacctatctc cctctctctc aataattcat atgttctttg
348651 aggataggga atatgccttt cccttcaagt acccccaaa gtacagacac
348701 atttttctac tgtgccagtt caactgtact acccttcagc aggaataaaa
348751 tccaaagatt tctatgatgt ttgttttgtt atagttaga atcaagcagt
348801 tgacatgttc atgtcggtac ctatttttag cctgataccc attaagaatc
348851 acaccactga ttttttttat tatgtgtaaa tatatatata acctaaaatt
348901 tgccatccca atcattttta atgtatgtgt tcaatggcat taacattca
348951 tttttgtgca accatcacca ccatgcacct aaagcagcag tccccaacct
349001 ttttggcacc agggacttgt ttctgtgaag acaatttttc cacggacctc
349051 ggggatgggg cggtttgtca ggggtgggga ggaatgtttt gggatgaat
349101 tggtcacact cagatcacca gtcattagat tctcatatag agcacacac
349151 ctagatccct tgcatactca gtctactgtg ggttttgac tctatgaga
349201 atctaattgt ctaattgtgc cactgatctg acaggaggca gaactcaggc
349251 agtaatgctc actcatccgc cactcacctc ccgtgtgctg accttctctc
349301 aacacgcagc ggaatgaat ggtctgtgg ccagagggtt ggggacctct
349351 gaacctaaag actcttcact ttggaaaact gaaactctgt atccattaaa
349401 caagttcccc attctccctc ccctcagac cctggcaatg accattctac
349451 tatgtctcaa tgaatttgac taagtatatc acacaaatgg catcacatg
349501 tatttttctg tgagtggctt atttcaccca gcataatctc ctcaagtcca
349551 cctctgtgca ccatgtgtca gaatttcttt cctttttaag gctgcagact
349601 actgattttg aaggaaaaaa acactctcat gtgctgtttt taatgttact
349651 ttgtttatta acatgtcgtt ctaaatatta cataaataca gcttacatac
349701 tagagtatca aacattgttc cagtaagaag ttcaagagta catttagggc
349751 tatcttaaga aatatgaata ctttggcttc cattattaca tttagtgaaa
349801 aaatcaatic aaataagagt tgtcatactc tgctatgatt aacaaaaaaa
349851 caagtgaata aataagagag tgtattttaa aaaaataatc aaatgctttt
349901 tgaagacctt gttctcttca ctgccacata tattcataca aatgacttaag
349951 taatctaata tgagaagtgg tcttcactc atattaggaa ctltgtaaat
350001 atttgttgaa tgaatgaact atctatggat atgaatttac tacttttaatt
350051 tgtgcttttt ttgaaaaaaa ttttcaagt aagagcataa gtaaacatc
350101 tgaagttcac attttgtcca gatcataagc ctatagaaca gtgattgtta
350151 caaacaccac ccatcatagc acaaatcaat gtgcattctt gaagctagta
350201 agaaaagtlc tatcatgttg tagaacgaal ttaaccagac taattcactg
350251 ggcttcaatc acttgtgata ttgtcaagaa aagggggctg gggctcctag
350301 gcttgtatct atttcaagca tcaagtgaat cctatcttta gggcctcact
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350401 agttgtagca tgtcttcacc cacttgtaat ttggctctga aaatgtattc
350451 aggcctccagg ttcaagaag agactttcca agcaggagac aaattcactc
350501 aagggaactc actcaaatgg aatatgagtc atggaaccga gagcaagca
350551 aaacattgct cttaaaagca agctcaacgg acacacatga tgaactcac
350601 agttgaacac tcttacaacc caaagtcacc ttccaatacc agttcaata
350651 aactactgtc ttttaatagg atcttttcag gaacaccata attttgtgcg
350701 tttttcaagg tgaatttgt ctgttatacc taagatgttt aaaaacagag
350751 gaaaaccaa agtgaaagat gataaagttt cacataagcc aatgtgtgat

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FIG. 1 CONT'D

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350801 ggatttgGCC taaagtagat aaagcaaat ccactaagtc ttgtaagagg
350851 gttgacttga agaaccactt ctccagtcac tatatagtag atatgatgat
350901 tcagcagtcac taatttagga aggcagagtg atactataca tgcattattt
350951 ttccctcttaa gtttgcatTT atagaagaag gtgggtggggg acaattttaa
351001 cttaggttct caagttctac cttaatgaaa taaaacacca ttggataagt
351051 agtggagatt ctaatttata aaatattcac ctccatcaaa ttctcttcatt
351101 tatcaacttt tcacgggatac ttctaataa ctattcttta tgcattttaa
351151 tcttaagaga aatcttgact aacctagaat atttatcttt acataattat
351201 catttcaaca ggtttaatat acgttaaacT tattactttg atttatcttg
351251 aagttaaaaa agtcatcaac gcaagcacac aaacaaaagT ctgaasaact
351301 cttaattatt ccttcacagt aaggctacta aactagcaac taaggcagca
351351 cttaacaatc cccaggtcag catctttaat tcacgtatgg gctctcccat
351401 tcatctcaca attcccacac tatcactgct cctgctgtca gaagatttgt
351451 gatactggc ccaggagagt tgctgccaac ttcccctttc caagttcaga
351501 agttcctcta atcaaaaatg aaaagaagac caaaaacgac taactttcac
351551 ccttttacat gttccagccc aaatttagca aaggtcacat ttaaaataca
351601 ctattctgga acaaggggtt gtttaaaatg ggtcaagaa aagccgtaca
351651 cctttgttat gttcctacac aaacacactg gtcccagatg tggaaaaaaa
351701 caactgtagt gttcttaacc tgcagaatca catcacccgt agagcagaaa
351751 ctggacacat cctcaacagt gccccagagc actcacacag aaccagcag
351801 ccttgogctt cagttcttaa aggctccaca ttactggct ttagcaatga
351851 attcctttag cagagggcca tccatttgcc aaaaatgctg agctgtgtga
351901 actctgtcca aatgattgat gcaaaaacta aagcagaatt ctcttaactt
351951 ctggacacac acaaaaaata aaaaaacaaa tggctttttt aggcacactt
352001 gattgaatta ctctctctg agccctttac cccaaatctc tcacctctcc
352051 ccagaaaaga tatttgagag gccagatacc taaaactagT caaaaagtyg
352101 accacaggtta ggtgtgagaa aaacacatac tatttattca acgcagtaaa
352151 agcaatggct ctctaactca aagtacgact ctcaaaaaca cacacgcgcg
352201 cgcacacaca cacacacgca agatctacaa gggaaagaat ttcttgcaag
352251 attatcacat aatctagtta tgcTcaaga catgtttgta aaaggcagaa
352301 tgccacttta gtctgcagaa ttgtttttgt cactgtcaag acatcagaga
352351 aaagaattaa gatgtgggtt agtttaagaa acagaaaagt aatgaagaga
352401 tatgtcCaac ctaaagtgc acattaaaaa gaaaatccca gccgggcagc
352451 gtggctcagc cctgtaatcc cagcactttg ggaggccgag gccggcgcat
352501 cacttgaggt caggagttcg agaccagcct ggccaacata gggaaccccc
352551 gtctctagta aaactacaaa aattagccgg gcgtggtggt ggatgcctgt
352601 aatcccagct actcaggaga ctgagacagg agaactgctt gagcctggga
352651 ggcagaggtt gcggtgagcc gagatcgcac cactgcactc tagcctgggt
352701 gacagagcag aggcctctgaa agaaaatccc aaaaaattca ccttaactt
352751 acttttatgc tctcctaata atgactttat tttaaagccc ataaagaata
352801 ataactacta aacttccacc acactaatat ctcagaacat cccccccaca
352851 gaagtataatt tacacaggtt agttttcagt caaacagaaT tcaccaacta
352901 ccaacattca gggagtagaT atccacaagg ggtaaacagc aaccatttca
352951 aaatcaatcc tctcctatgc taatccaccg tttaTcccc tgccaaactt
353001 taataatgct tgtcccttag gatgttgaaa tatattatta ttaaatcgat
353051 taggcacctg gaatgcatac aaagactcaa tatataaaag gaaatcacac
353101 taaaagctct tatcccaaat agcttgactt tatlacaaCT tggttagctg
353151 gtacaTgaa ggtcagcact ccgggtttct tcgaaccaga agctcaacat
353201 ttcaaatgcga ggttttgacc gcaaatttcc agctaacagc aggtgggaaT
353251 gttagacaga gtggaagggg cccacacaaa catggagaga ccccttttct
353301 gctctcagca cagacctctg caaacatga ttctctgttt ctaagggtcc
353351 tctgtccctt ggctaaaaga tgcccttagag taactctcag aaaccctacc
353401 agtcaataaa ccatlaagag ataaaccaca ggcaggcggt ggtggtcac
353451 ccgtgtaatc tcagcacttt gggaggctga tgcgggcaga tcacgaggtc
353501 aggaagttga gaccagcttg acccaatgg tgaaccctcg tctctactaa
353551 aaatacaaaa attagccagg ttgtgtggca agcacctgta atcccagta
353601 ctcaggaagc tgaggcagga gaatcgcttg aaccagagg gccgaggttg
353651 cagtgagccg agatcatgcc actgcactcc agcctggagg acaggagtg
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FIG. 1 CONT'D

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353701 aactccatct caaaaaaaa aaaaaagaac ttattatcac aataagtgta
353751 taaaaatggt gccactaatc acaattcact ttatacactc atgaaaaatgg
353801 ttctatcaaa ctgccttccc ttcccctcca attagtttga actactgagg
353851 tatctgggta tgcaataaat attcaaaagt tccaaacatt aaaaagccaaa
353901 ctagagaatt ctgaaaaaca tctaaactcg ggttgtgtaa gtaactaatt
353951 aaaccttggt tgaggcgagt ctatgtaaaa ggaagccctg aacgcatgtg
354001 gtgaggagcg ttggaattg caagttcacc agagagtgcg acagtcaagc
354051 tgaaccactt agcaaacagt gcccagggtt ggtttgcctt tgatgagcaa
354101 gttagacaaa cgcccttcog acttgacctc tctttagtat tataagaatc
354151 tacataactc gttcctttca ttctgcaag gatcaaatc tcaataacag
354201 gcaagaaaaat gcaactcctg tccaagtgag aagtcaacta taacagggct
354251 ggtttatagtt gaactcttacc ttctaactgg gctttaaata aaacagttcc
354301 aaggagagacc agaaggatca tgtgaccagg agaTgaacaa agttcccgac
354351 agaatgaaag tccctttata gcccatggaa taggggaagt gagagtataa
354401 aaacagaagg gtctaataca gtcttcttgg tattagaaac taacctctgt
354451 ttatgacggt atgtggcaga acaattataa agtgttctaa ggcaaatgag
354501 ataaaaatcc agattttatt taattagcaa agaagacaaa aataaaaact
354551 gctcttctga agtaatttat aaactattcc aaactttcca acattgaaac
354601 tattccaatt caatatatat actctgaaaa taagctgttt ttcttttcca
354651 caaattttct ttagtatacaa acaaaaacac agagcattga tggctttaat
354701 atccctattt taaaaaatgc taatgccgcc tctaaaggag ttcttaccct
354751 gtccctaaac tccaaagcta aactagttga atgttaataa ttggaagacc
354801 acctaacagg ggtgagcgag tgccctggca tccagctccc ccacaagaca
354851 cattccagat gacacagaag cagcaaccac acctaaactc gtccaactgc
354901 ttgttaagtt aactgcaaga caaaaaccca aaactgtcag tctataattc
354951 atgttatagc acatcaagta caaaattct caaatcaag aagtttttgt
355001 ttgttctcaa aatgtaacta aacatctcac catatggaga aaacataaatt
355051 tatcccatla cgcaaaaaac atttgtcagc ctactgctga tcaagaactt
355101 tctatttggc ccaccaaaaag aagaaaaaaa cgcTggccac caagccttaa
355151 caccgaagctg tccaatactc atcccacaga ccaacttcag aattagattc
355201 ctgggctcac gtttatcgct tcccctccaa agcaagatcg taagatataa
355251 gtTgcttagc acacaggatt tctggaaagt tctctactct ggTtaacaaa
355301 ataatacttc ccagctgttt ctcttaacgt tcaaatacac ataaaaataa
355351 aaaaatttctt gaaaagaatc agtttgcat ttgtcaactga tctatcttga
355401 aacaattgttt tatccacatt ttctccctga ttgcaaatatt tattcaggtc
355451 tgtaccaaaag gagtatctgg gtgctccttt gtgaagtcct tcttaataaa
355501 acttgtggac agtttcatata caggttcata gcaagggatc cacaatcatc
355551 aacttacttt tgaaaactccc ttgaactact gagtccatac atttttgttg
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355701 tagtctccat ctctctagca tttTggccca cagcaggaag gcaaggtcat
355751 atagcatccc caagttgagc tctaaaaata atagtttttg cagtcaattt
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355851 ggctttcttt ttaagagatg gcagctccac tatgtgtgcc aggctggctt
355901 caaactccta gcctcaagca actctccccc ttcagcatcc tgagtagcta
355951 gaatacagcg atgagccaat gtgccagct atggaattta attttgactt
356001 ccagaacttc attcaTgtac tcaactgtat ttgtagcat caggaaataa
356051 aatgtaaaaa cacatttgte aattacgtaa ctTgtattgt aacctaaaga
356101 atacacccta gaaagaggcc tggcgcgagt gctcaTgct ataatccag
356151 caatttgtaa ggctgagggt ggagggaacac ttgagcccgag aagttcaaga
356201 ccagctcggg caacataatg aaacctgtgc tctacaacaa ataaaaataa
356251 agaattagc tgggttgtgt ggccacacat cgtagtccca gtTcctggac
356301 tgggaaggaa ggaggactac ttgagcccgag gaagtTgag ctacagtga
356351 ctgtgatcac accactgtgc ttcagctcgg gcaacagaac aagaccctgt
356401 atcaccagga aaaaaaataa catacaatt atgaatat atataacac
356451 acacacacac atatatatat atgcccata aataaagagg tgagtcttct
356501 tttttgtctt ctctctattc tctaattttt ctacgttga tctgtaatat
356551 ttgtaggatt ttaagttttt ttaaactttt ttttttttt ttgagacag

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FIG. 1 CONTD

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356601 tcttgcctcg ttgccaggcg tggagtgca ggtgacaact tctccctccc
356651 agattcaacg aattctcccg cctcagcctc ccgaatagct gggattacaag
356701 gtacgcacca ccacaccagc ctaatttttg tatttttagt agagacaggg
356751 ttccaccatg ttggccaggc tggctctcaa ctctgatctc caagtggccc
356801 accttggcct cccaaaagtc cgggattaca ggcgtgatct ccaagcttgg
356851 ccatTTTTTT tttttaaagc acaccttcat ggtgaggtat ttcaaatgtt
356901 ttcactcatt tatttaattc aacatgcatt tttagcgccc agctccatcg
356951 ccacactgtg acagactctg gggaaatcaca cttattttgga gtctttctaa
357001 aggaagtttt tatcatgttt atacttaata tgagaaaaat gaaaactagt
357051 aaaggaatg acctgctggc acaggaaagca gcagcagagg cttttctgt
357101 aaacttccta ggacagatct taqctaaaag tgaggagaag gtttccagca
357151 acttgagccg agacatctgc ctctgccagc gttgttctca ctggtgttag
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357251 gtggagaggc ccagagaggga ttctaacatc cgtcaccaaa tggacagaaa
357301 aggcactaac ccaatttaaa attatatcac cgggttgaaa taaaattcaa
357351 agaaacagct ttctataata agaggttcaag ggtgtcacag gaaggacagg
357401 aaaaaaatca taacctattt tctattagaa atgattttact ttgatcatca
357451 ttccattctg tgtcgggctg cagacaaaag cagctacatt tgaccttatc
357501 aaatatttat aatcagaata taacctcaaa caaaaaaag atacattttg
357551 aaaacatcgt ggtcaacttt gatccctatg tgtgatgaag tgtgtcctct
357601 tatactcaa agaacacagc tgcgatctt tgcagggtgt tgataaacct
357651 cttgatacca gataattctg ttgtcaaat gacaaaatgt ctgcaaggat
357701 agcetaatgt taacattcta catgcacaac ttagctagat attttgaacc
357751 tccaaggcta ttgctctcta ccttttaatt tctctgaatc tgtgaacaca
357801 accatacccg ccttcagctc actgatcatc cttaatgctt cctttaaggt
357851 actatcttca tccagttcaa cattttcag gtccttaata tgtgccaggc
357901 actatagggg atacagacga atgagacagt tctgtctcac gaggagctta
357951 cagcttgatg cttgtggtct tcaaaaaaat gcacaaaac ttccagactc
358001 cccaaagccc ataatctac aggtcacaac gatctgtgaa tctcagatta
358051 agaaactcaac ccagtgcaaa accaaaagga gtcacagca agttcttaac
358101 aggtaaataa ctgtgagctg taattagaca ctaatagaat tgcagagcgt
358151 acacagatca aaatcataca catcccagc ttagcacagg gcagagggtg
358201 aaagacagca aggttaagct cgaataaac acatatgctg acattaaaga
358251 agacttgaaa ctaaaatag ctgtttgtta gtccaat tag ttgtggcacc
358301 ttatgttcca acctgcagca cagctgctag gaccttggtt cgtttcctgt
358351 cttaactaga aatgaaagta gaggaacaac gactttgaa acaatgaaca
358401 gggaattaa gacgaaggcg agatttcagt tttaaatggg ttcactgatt
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358501 gcgggggaga cgagcacaaa gggagttaa ggtggtctg ttcttgtttg
358551 ttgtttaa gttacctctgca ctatatctga ctgcagcaga gaatagcga
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358651 ttccagctcg ttttcacagt aagatgtcgc caaatccaga agacctaaaa
358701 gtaaaaatag tgaagaggtt aatcaaatgt ataataattt ccaatcacca
358751 gagattttgt ttgtgtgaac agaggtgtac aggtaaata gaagtctctt
358801 agtggataag attctgaatt tgaagtaata aattctcttt ttactgtctt
358851 gctctctcca ctccacacc tctctataat ttacttata caattctctc
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358951 ctaaaacgct aaatgcatta gcaacttata ctctactact agaaaattaa
359001 aataagccca tagcttaata ctagggtgat ggggtgacag gtacagcaaa
359051 ccacattggc acacgtttac ctatgtaa ca agcctacaca tctgcacgt
359101 gtaccccca acttaaaaat aaatataaaa aaaaaaagtc cttcagtaac
359151 attagaacaa aaaagcctat ggtcataaac taggtccaaa actattaacc
359201 ataataacta cacaatacta cttttaaga tacttacttc aaactttttt
359251 taagcaccaa attaaagcca atacacctga agctttttac atttcaggac
359301 taagaatatg aggggatata ttctccacca tgcggtctgt ccatcccaat
359351 gctaccacag tacctatagc atcttctggc ggcaggtcga ctgtgtctgt
359401 gttaggttac tggagaagag cagcatacac tgggtaaaga aactgatcga
359451 ttctctacac ttccttcagt tcttcattcc aatcacgact gaaactggat

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FIG. 1 CONT'D

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359501 cgaaaaatgct cacaccta aaacgcaaagc aaaagtctta tttgttcagc
359551 agcaattttt aaaaaagaa aaaaaat tac ctaattaa gtgataaaatc
359601 agataaacag aagatccct gggccggcg tggtggctca tgctgtaat
359651 cccagcactt tgggagcgca agcgggtaga tcacttgaga tcaggagttc
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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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FIG. 1 CONTD

SUBSTITUTE SHEET (RULE 26)

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372901 ctttaattcta ttacattaaa tatcacgaac aaatagctat aggcattagg
372951 ctcttttggat cttgcaaaaa atacaactta gacatataga atctttactt
373001 tcaggtaaat cctggaaatt agaaaagtca tactgaggag caaaaaacct
373051 ccagctctct agtcagtaat cagttaaact tcaatggagc taccaaaaga
373101 aagcactctt cctctctcca tctgatacat tcaacctgtg aagaaactga
373151 cgtgtaattg aaaaagaagg tagaagggga aatggagtggt gagacacctc
373201 acctgccatt tgtccagaac agccatggat gaagtctgac cacaggcaat
373251 gccaaactac cttctaatat gtaaacagtt tgaactttt cgaggagttg
373301 gttgatttgc tgtagaacct gatcccaact ggcacaggtt gttataacct
373351 caagcaaaa cctacaagag aaagaaaaag gaaaaggaaa gaatagtcc
373401 ggtgaaattt ctaccccaac acaataatc ataaaaatta aaattatctt
373451 acttaagtga tacttaagat gtgtcaaacg gtctctatgt ctttacacac
373501 attaacctat ttaacctgcc tagtaatcct gaaagagtgac cctagagttag
373551 gtatgaccca ctttatacat ctccgtttta tacatggaaa ctgaaacatg
373601 agaggttaag tgacttgctt gaggtaccaa agctggttaag tagcgctaa
373651 agaatttaac cccaagcagt ctagctatgc tcttgaccac catgtacatc
373701 tccctctata atttgttgtt gtgtgtatgc acacacaact acacatacac
373751 acatacgaat gtggcatcaa taggaaatgc ggtatatgcc acataagtat
373801 tagtgatgta aaacatttgc tcaactcttt gggcataaat attcatgttt
373851 ttccattgaa accattcttt ttgttttgc ttggtttttt tttttttttt
373901 ttgagataga gtttcaactc gtccccagg ctggagtcca gtggtgogat
373951 ctacagctcac tgcagcccc gccctccggg ttcatgtcat tctctactct

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FIG. 1 CONT'D

SUBSTITUTE SHEET (RULE 26)

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374001 cccaagtagc tgggacgaca ggcgcccgcc accatgcccg gctaattttt
374051 tgtattttta gtatagatgg ggtttcaccc tgttagccag gatggtctcg
374101 atctcctgac cagctggtcc acccatctcg gcctcccaaa gtgctgggat
374151 tacaggcggtg agccaccatg cccagcctca tggaaaccaa tctaacaacag
374201 actataaaca gagagatgaa ttagggaggg aggtgtlggc agtagagga
374251 ataatttccct ccaacattag gaaatgtcta agcccccgct cccaccctcg
374301 ctccacgtgg ctgcaggagg tggtcacagt atatactgag tgtggcttcc
374351 atgattcttg tctgatcgct gccaaaggcaa caacagtaga gccctctggt
374401 atatgtgtta caggttcatt tcacaggtac aaaaacaata acctgcaaca
374451 cctcctcaaa gtatattcac ataataatct agtttaatta tgcaaatatt
374501 aaatttcagt ataatatttc aaagtaccat atgcttaaga ttaaaataaa
374551 tcagggaacc agccggcata aattagcaag tttgagctaa tttcagcaat
374601 cattctctcg gcactttcca aatacatcac attcccttgc agtgcgtctg
374651 actcttgttt aaaaactggg gctatagtcc cactaaacca gaattggact
374701 aggaacacgt ggalctgggg catgagccct gtgtgctatg cctggctcca
374751 gcacatccca gtcatgaaat ctltgtctcc ctgagctttt gggtttgttc
374801 acctataagt tgtcctactt aataaaatct ctgtaacatc actgagggac
374851 ttcaaaagga ggacagtat gatctaatct gtgttagaaa ccagaaggga
374901 cagcaaaaga agactggaca gacggatcaa cttaaaagat aggaataga
374951 agggactatg gcagttagct aggcaggaaa tgcacagact tgcacaaagg
375001 caatggaaat ggagagggaac aaaaatggag aacaaaaggc caaggaaagt
375051 ggagaggaaa tggagatggt acaaaagatt agaaagacaga atcaatgaat
375101 tgagtgaact taaagataag cacaaactgg gggcttaaca agtgttaca
375151 tacctactag gaggatagta aagtattttt ttccaaactc attacatata
375201 ctgaaaaata aaatagacct taaggatggg gtccactaaa aaaaagatgc
375251 agaacactgt cacacatctg agctatagtc ttagcaaaaga gcatggggat
375301 cagctgcctt aaaaaatgaa ctctaggttg ggtgcggtag ctacaccta
375351 taatcccaagc attttgggag cctgagacag gaggatcgct tgagcccgat
375401 agttcaagac cagcctgggc aacatagcca gattcttctc tctacaaaac
375451 aaaaattttt tttaaaaga atgaattcta ctgccatcaa aagtgtaaac
375501 ttgattatac aatacagctt atgctagaga gagagtgca ccccaagg
375551 tttttagcta catgcacagg gctacaatat tcacaccaca tcaagtaca
375601 atatggtcat taaatcaga ggattttcac aatagccaaa agtggaaaaa
375651 atccaaacat ccatgaacag atgaatagac aaacaagtg tggtttacag
375701 caggtccttg aaaaacgtca ttctattcaa catcattttg ttataacctc
375751 aatgagaaaa aatgtcaatt cccggccagg gccactgtct gtggagtctg
375801 catgtcccat gtctgtgtgg gttttctctg ggtactctga tttcctccca
375851 caccccaagg ctgtgcagac tagtttgtgt ctaagctgta tacatgtctc
375901 aatgattcta gtgagagtga gtgtgggggt atacatgagt gcaacctgta
375951 tctgtccagc ggtgcttccc cactgtgtgt cctgcgctgc cagaagaggc
376001 tgtggccaca tgcaaccctg aactggaaac aacgggttgg aaaaagtgtg
376051 aatgaataaa tgaatacaaa ttattagaaa ataaaattc acaaatagg
376101 ctgtgcatgg tggctatgcc tgtattccca gcactttggg aggcagaggc
376151 gggaggatca cctgaggtca ggagttcgag accagcctgg ccaacatggt
376201 gaaccccgct ctctactaaa atatacaaaa aattagccag gcatggtggc
376251 aggcgcctgt aatccacgct actcaggagg ctgaggcagg agaatacatt
376301 gtaccacagg ggcagaggtt gcagtggggc gagattgtac catgtcactc
376351 cagcctgggc aagaagggtg aaactctgtc tccaaaaaaa aaaaaaaa
376401 aaaaattcac aaagttagaca ataaccatca aatgtcataa caataaaca
376451 cacagtcaaa caccctcagt gagctgtcac atttgtgatc gtttgtcttt
376501 gaactgtgtg gcagttagag gtgcacctgt taatttttgc tttgcaaaaa
376551 ttatttccct gaactaaacc accaaccata tgatcacccc aactcagtga
376601 ttaccataaa attggtgtaa taattctctt attgctttta ttaattcttg
376651 ttaaatatat gtattagttt gcaatttttt aaatgtttaa gaatgggttt
376701 gggctctcag aagtttggtg atgtctttgt gaccagaaat atacatagg
376751 aacttaactc ttgtttttat caattagcca atggtaaaac tggtttcatt
376801 acatgtcttt ttgcttaaaq ttgtagtctc caagatacta tcaatgacat
376851 taatgggcca ctactatat gtatccaalg gaattatttt cagccctgaa
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FIG. 1 CONTD

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376901 aaggaaatgaa gagaatccta tcatatggta caaagtggat gaaccttgag
376951 gatattatgc taagtgaagt aaacccagtt caaaaggaca aacatttgtat
377001 gatccacttc acgtgaggtta cctagagtaa tcaaaactcaa agaaacagag
377051 tagaaagtgt ttggctgggc acgctggctc acgctgttaa tcccgacatc
377101 ttggaggccc aaggcgggca gatcacgagg tcaggagatc gagaccatcc
377151 tggctaacac ggtgaaaccc tgtctctact aaaaatacaa aaaaattaggc
377201 ggggtgtggt gtgggtgcct gtagtccagc clacttggga ggctgaggca
377251 ggaataatggc gtaaacccgc gaggcggagc ttgcagttag cagagatcgt
377301 gccactgtac tccagcctgg gcgacagagc gagactccat ctcaaaaaaa
377351 aaaaaaaaaa gaaagttgtt gtcaggggctc gggggaggac agaatgggag
377401 tgaattgtta ccagggacag cgtttcagtt ttgcaggatg aaacagttct
377451 gtgggtgcat gctggtgaca gttgtatgac aaggtgaaca tacttaacac
377501 cactgaacta tacacttaaa actggtgaag ctggtaaatt ttatgttaa
377551 tgtatttact atgatgaaaa aaaaaaagaa taaagaataa aagcagcata
377601 ctaccctctc catcagctgc cagagccatt gaatgatgtg agccacaagc
377651 taactccacc acttgcttga tcaagagatt ggtacagacc tggacgggag
377701 caatgccttg gttggtcgtc ccattcccaa gctggctata tccaattgtg
377751 cccaggcatc aaacactaac atctgtgcac acaaaagaca caaaaatac
377801 gctccaaaaa gaaatagtaa cccgttactt tcttcccagc aacttcgtac
377851 agctccttct ccaaccttca ttctctccc attgccccct cctctctatt
377901 aagtaaccat ggacagagta aaggagagag agatgggtga cagaaaggga
377951 tagacagatg caaaatcttt aaagaaaaaa cttggttaata acatagaaa
378001 atcagttttt tgatcaaaag caaagtttac gtagtcaaga attaggtctt
378051 ctaaaaagctt tgattcatct caatagtttc tgtgtcagat gccaaagaaa
378101 aggcagatga taagaaagct cgatgttaat gtttaccatt gcttaaacaa
378151 ataccaagtc acgggggaacc cacagggggc gtgtggctac tcgctacca
378201 agtatagggg aaagagatag actgtttaca aaggaacaaa aagtctcagg
378251 gctcttttga agcagactat ttatttttag tggcatgaaa tctggctgaa
378301 tttttttttt tttttacata aagcaaccaa ttttttacgc tcatttattc
378351 tgtgtcagga atttggacag gggacaatga agatggcttg tctttgcttc
378401 acagtgtgtg tgatctcagg aagattaaaa ggctggagat gacttgagag
378451 ttgaggacta gcaaacacct gaggcattgt cactcacact gctgtgacta
378501 tctctgaaaa gcataatcag cttattctaa cagattcaac tcaggaaacag
378551 ccaaatgggg gagacacaca gggtaaggtat tgcggggatg aggggtgcac
378601 ggagctccca tgccctccct ggcatgccac cccctcccag caccctcgatg
378651 tggtcacca cccgggaagct cctctgtctg aatttttttt ataatgactt
378701 tatcttttct gagattctga tgaagacaac tttctttgtg ttatctcttg
378751 aagtatcatc gtttcaggca ttcttttcca cagcaccccc gagtgccaa
378801 ggcaggtctc ccagagttac acattctcct cttatctttc ccatggtaat
378851 aaaaactcct gacctattaa ggcacagtct cctggcaaca acactcaagg
378901 gcaacagcag aaatccaaat attacagtta ggctgctgtg cactcacagc
378951 agtccccagg caaccagggg aaacagactt ctactgtctc actgtagaac
379001 gaagacagcc caccacaaat cagagtctct ttccaggtga catgtggctc
379051 acaagagcca ttccctccta cagaattat gacagaaacc ataaatggga
379101 aatttcatcc tgagaaagat gaggcttaag actgaaagaa agagtataaa
379151 acacaaaaaa tatgatccat gatatttgtt taaaagctac ggcaggtgaa
379201 agaaatgtcc aaactaatga gtgttttaac cccgtgaaac agaaaaatag
379251 acttaaatag agaaatgcac acctgttctc tagatgggaa aattcagtat
379301 caataagaat ctagtgtttc ctacataaac ttataaagt taaatagcaa
379351 taaaagctta aagttacttt ctggaggtag acaaatgtat tagaaagttt
379401 aatgggaaga ataaacaaac aagaataaat aggaaaaacc tacaaaaaaa
379451 aaagcaagaa ggtatctaatt tctaccagtt actaaaacct atacaagatt
379501 tctatgaggc tgggcttgcc tghtaatcca gcaacttggg agggccaggtc
379551 aagtggattg cttagggtca ggaagtcaag accagactgg ccaaccaggt
379601 gaaaccccac atctactaaa aaaaaaaaaa aaatacaaaa atcagccagg
379651 catggtagcc cgcaacctga atcccagcta ctcaggaggc tgaggcaca
379701 gaattgcttg aaacccaggg cgggaggttg cagtgggctg agattgtgcc
379751 ttgactccca gctcgggcaa aaaggactct atctcaaga aaaaaaaaaa

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FIG. 1 CONT'D

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379801 aaggttaatt ttaaaaaaat ctgtaattct aaataatctc aaatagaaga
379851 cgctgaatcc atgaacaatc agcaacaagt tctggaaaga aacattttaa
379901 gatcaagaaa gaacacttgg aaataaaaca atgggaattgt taataatttg
379951 acataagcgt tgtaagataa agt tgaagaa atttcccgga acacagatgg
380001 gagagacatc tttaaaaaa tcatgaagat caggccaggc atgggtggctc
380051 acacctgtaa tccagcactc ttggaagact gaggtgggag gattgcttga
380101 gccacggagg ttacaggtgt gaaccactgc ctacacagt gaggtcgagc
380151 tgagccaaga ttgcaccact gcactctagc ctggacagag agaccctgtc
380201 tcaaaaaaaa aaaaaaaaaa aaatttggaa gatcactcca gaatctctaa
380251 cttttctaaga aaaattccat aaaggagaaa acaagaagaa aaattttct
380301 ttttttgaga tggggtctca ctctgacctc cactctgtca caaaggctgg
380351 agtgcagtgg cgcaatcata gctcactgca acctcaaact cctgggctga
380401 actgatcctc ctgcctcagc ctctcgagta gctgagacta caggtgcgtg
380451 ccacatcccc cggctttttt tttttttttt tttttttttt ttttaagaga
380501 catgcctctg ctatgttgac caggctggtc ttgaaactcc ggcctggagc
380551 aaacgtcctg ccttggcttc ccaaatgtct gggattacag gcatgagcca
380601 ccacacacag ccaacaaggg aaactatcca tgaattacca caagaagaaa
380651 tttccagaaa tgaccaatca aataaaataa aaattacacc agagtaacaa
380701 atcatgatta tgtcacaata cttaaaaaaa taaaaataaa aataaaaaaa
380751 agatccttga agcttccaaa gaggaaaaaa cagtcacata caaataatga
380801 aaagttgccca ggcatagttg ctcacacctg taatcccaac accttgggag
380851 gccgagccac aaggatcact ttgagccagg agtttgagac cagcctaggc
380901 aatcatggtga gacctcatct ctacaaaaaa atttaaaaat gaggtgggaa
380951 gatcgcttga gccacggagg tcaaggttgc aatgagccat aatcactcca
381001 ctgtactcct gcctgggtga cacagagaga gagacccctg ctcaaaaaaa
381051 aaaaaaaa aaaaaaaagg ccaggccagc tggcttatgc ttataatccc
381101 agcactttgg gaggtcgaga tgggtggatc acctgaggtc gggagttcaa
381151 gatcagcctg gtcaactagg agaaaacctg tctctactaa aaacacaaaa
381201 attagccagg catggtatga tatgcctcta atgttacttc ggaggtctgag
381251 gcatgagaat tgcttgaacc caggaggctg atgttacctg gagctgagat
381301 cgtgccactg cactccagcc taggcgatag agcgagactg tctcaaaaga
381351 aaaaaaagga aagaagaac cagtgtgatg ccaagaaggca tgattacgca
381401 aggcaaaagt gagaatacca cctcattatg ctcaaactcca gttatattca
381451 taccacatga tgaatgctcag atttggattt cacagctctc ttgagaagaa
381501 tgcagagaac ttgaagtaga ttcagtttag agttacaggc acttagaagg
381551 ctagatacta aaacctgtga cagcattcta ggaagctgtg attcctcagt
381601 ctagacaaaag aaaggccggg atgcaaatca tctcccaaat gccacctgag
381651 acaattatcc aacaaaaagc tagggacctc agagaaagag agcaagagtt
381701 aatgtatcta aagtataaaa ggaagcattt aaatagataa tgaattttca
381751 gagagtggtt ggtgccacca ctacagatcg attacacaca catacaaaat
381801 gtccactctc ccttagtgat cttgaagagg cagagtaaaa aaggacaaga
381851 acctatcaac ctgcatcccc gtttcttcca atatggcaac tacatgaatg
381901 ccagagaaca gatgaagatt tcccgattca agatgcagc aatgcacaaa
381951 gaagggaagc caggatgcga tctatgttta gaaaaattga ccggccgggc
382001 acagtggctc atgcctgtaa tcccagcact ttgggaagcc aaggtgggag
382051 gatcacgagg tcaggagttc cagaccaacc tggccaatat gatgaacccc
382101 agtctctact aaaagtacaa aaattagcgc gggcggtggg gcacggtctc
382151 gtggtctcag ctactcggga ggttgaggca ggaagaatcg ttgaaccagg
382201 gagatggagg ttgagtgggc cgagatcatg ccaactgcat ccagcctgga
382251 gacagagcga gactcctctc caaaaaaaa aaaaaaaa aaaaaaatgc
382301 cgggcgcggt ggctcacgcg tgtaatccca gcaacttggg aggtcgaggt
382351 gggcggatca cgaggtcagg aga tgcagac catcctggct aacacggtga
382401 aaccocatct ctactaaaaa tacaaaaaat tagccgggca tgggtggcgg
382451 ccgcatagtg ccagctactc cgggaggctg aggcagagga atggcgtgaa
382501 cccaggaggt ggagcatgca gtgagccgag attgcaccac tgcactccag
382551 cctgggcgac agagagagac tccgtctcaa aaaaaaaa aagaanaaga
382601 aagaaaaacg taccaaggaa accctgaag ttgatttga gaacaaagac
382651 cagtgcacta ttaaggaata ggattgcagc tgtcccgtct ccgtcccat

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FIG. 1 CONT'D

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382701 tcccactccc gctccctctc cctctcttcc caccgtctcc ctctgatgcc
382751 gagccgaagc tggactgtac tgcctgccat tcgctcact gcaacctccc
382801 tgccctgattc tccctgccca gccctccgat tgcactgcgt tgcagggggtc
382851 cgccgcacca cctgactggt ttctgtattt ttltgtgtga gacgggggttt
382901 cgctgtgtgt gccgggttgg tctccagctc ctaaccgcga gtgactctgcc
382951 agcctcgccc tcccgaagtg ccgaagtatg agaaccgaagtc tgcgtcaactc
383001 agtgcctcaat gttgccacag ctggagtgca gtggtgtgat ctcgctagc
383051 tacgacctcc acctcccagc tgcctgcctt ggcctcccaa agtgcccgaga
383101 ttgcagcctc tgcccgcgcg ccaccccgct tgggaagtga ggagcgtctc
383151 tgccctggcg cccatgtgct gggagtgtgag gagccctctc gccccggtgc
383201 ccagctctgg aagtgaaggag cgctcttccc cgccgccacc cccatctagg
383251 aagtgaaggag cgtctctgcc cgccgcccca tgcctctggga tgtgaggagc
383301 gcctctgccc agccccgacc ccgtctggga ggtgaaggagc gtctctgccc
383351 ggcgcgcccc tctgagaagt gaaggagcccc tccaccgcgc agccaccgccg
383401 tctgagaagt gaggagcccc tctgccgcgc cgccaccgcg tctgggagggt
383451 gtaccacaaca gctcattgag aacaggccat gatgacgatg gcggtttcgt
383501 cgaatagaaa agggggcaat gtggggaaaa gatagagaaa tcatgattgtt
383551 gctgtgtctg tgtagaagaa agtagacata ggagactcca ttltgttctg
383601 tactaagaaa aattctctct ccttgggatg ctgttgatct atgaccttag
383651 ccccaacctg gtgcctctgt aaacgtgctg tgtccaactca gggttaaatg
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383751 catgctcgtt aagagtcatc accactccct aatctcaagt acccaggagc
383801 acaaacactg cagtaggcgc cagggtctct tgcctaggaa aaccagagac
383851 ctttgtccac ttgtttatct gctgaccttc cctccaactat tgtcctatga
383901 cccctgcaaa tccccctatg cagaaaacac ccaagaatga tcaataaaaa
383951 aataaaaaaa aataaaaaaa taataaaaaa aataaaaaaa taataaaagt
384001 gcattgcaac acaaatccac tgaanaatta ggcgtgaagg accatcattt
384051 gctatatcta atcatccaca gcttttatgga ggcagtcgaa aacctcagaa
384101 gtttgctcaa ttgcaagac atcctatagc ttctccagag tttagccgaa
384151 gtgtttaact tccaactgct ttatgtactt cctctcagaa attaagaagc
384201 aaacaatcca aaatcagtta tctggtatag ccttatctcc cctaagctta
384251 geattaacgc gtcaatttct tacaactgta aaagttagat gggttccctc
384301 cttaacctg gtgctgagaa gaacatgtgg tccactcccg taactgaggc
384351 tttaaatctt ctttccacat aagccttcta gctttttggg tacaagtgtg
384401 ctctggttat ctccagttcc tagacagtta ctatagtcca gtccaaatcc
384451 aagagcctag aaaaatagata gtttttttct tgaagtcttt gaccgaaagc
384501 tgtattaaaa gctcccttct ctccctctgaa aataagacat ttcaactaca
384551 gegctcagga ggtgaaaaga gactgatatg gttgttaaga aaaattcaac
384601 ctctgtgac attgcttacg ttccagaatt ttgtctata ttatgaaact
384651 cagagtgcta tggagttagc gggttttaa tcaagaactc gaaaaaagc
384701 aaactatcaa agccatagtc ttccctgaact tcaggatctc ttattattata
384751 cccgcctttt tctccacttt tgaactggac actttgaaga ccaattgcca
384801 aataagtcct aaaaagaaac taggtttcaa gagactctta cctcatattc
384851 gtacgtaacg tacagtgctt cactgctgca ggtgccgaag acacacgcct
384901 tccgaataga cgcgatctct tgaggggaga gtgagtgaa gatgggccac
384951 ttccgacat cccacatgac agcaattcct ataaaatgct
385001 cgaactctct gctggaacag aaggatttcc agaaaaaaat taalatagca
385051 ctgagctaac ttccaataaa aagacctgtt aataaaatct acaaaaagct
385101 gattctagaa taagtgaact accttgggt acatggatca ctcaatttcc
385151 cccagccatg tgtgcattcc ctccccaacc ttcaaaocccc ggaacttctc
385201 acaagagaat aacgtgcaag aactagctgt ttgtcttgcg cacttcttag
385251 tcagtgctta tctgttccac atgtgcttcc aactcaacct ctctcttagc
385301 ctctaaaaac agccaaaagca gccaggtcaag accaagttct ggtccagca
385351 cctccaacag cacacacaga gggcgccctgc agctggagca tgcctagacca
385401 aagccttgtc cccacccacc agagatatcc tcccaccagc ccccaacttg
385451 gatgacaagg atcagcttca gccccaggta tcataccaca aattcaatga
385501 ggatataacg ccgtcaaatc aggctattca ttgtcactgc atagccagac
385551 tactggaata acatttggat gtcttgacaa atgtgtgtgc aggtggaagg

FIG. 1 CONTD

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385601 ggaggtaatgg gtgaggacaa gtaaaagatt tgacagggga gtaatacatg
385651 aaaaatgggaa aaaaactcttg gtttcaaatg gacaaaaagg gataagaaga
385701 aaagtctcct tatcatccct cctcgaccct ctctc aaag gccaccactg
385751 ttcccgatga tctgtaattc ctctcgaaaa cagtgtcatat ggaagacata
385801 catgtatgca tagtgtatg tgatatcttta aaacacgaag cacaaatgga
385851 agtttttttt cctactctaa cagtacatcg gggaatcat tctatatag
385901 cacacataga cctgctacat tctcttccaa tgtactatg gcaatccatt
385951 acatcgattt agcaatttac cttatcttct actgagagac atttaagtca
386001 attccagctt tllgctagaa caatagtgca attgttgctt gcacattatt
386051 gtattgacat gtcctgtttt atacagaaat ttctaaaata aattcctaaa
386101 aatgaaaatt gctaggtcaa agtctaatag ctattttact gtactagctt
386151 attaatattt caaacagctt tctattgaag tagtggccat atataaaatc
386201 accatggatg taggatggca cctgtttaca cacacccttc ccacacagcg
386251 tactctcaag gcaatttcagt ttgtttttaa ctggcatttc cctgtgatga
386301 gtggagttgg atgtcacta aaaaaataat caggccgggg gaggggggtg
386351 gctcacacct gtaatccagc cactttggga ggccaagggt ggcagatcag
386401 gaggtcaaga gatcgagacc atcttgacca acatggtgaa accttatctc
386451 tactaaaaat acaaaaatta gctgggcattg gtggigtgtg cctgcagtcg
386501 cagctaacta ggaagctgag gcaggagaat cacttgaacc cgggaggcgg
386551 aggttgcaat gaactgagat tgtgccactg aactccagcc tgttgacaga
386601 gcgagactct gctcgaaaaa taaaaataaa tgatcagaat aattgcaaca
386651 ataacaacta acttactggg cactatgtgc caagcactat ttttagaaaa
386701 ttatatatta ttcattcatt taatccctac tttaaccaata aggaatatgga
386751 gaaaaagaga ttttaagaag tggcagagtc gggatctgca ccaggagcaac
386801 ctgaagcctg agtctgaact ctccacctct cactcacatt ttaagagccc
386851 actgtcagcc ttttgtgcaa agtgccatc tttttactt ggatcattgt
386901 tcttttctt gttcttgatt tataagtatt ctttgtatg taagatgatc
386951 tttaagtctt ttaaaagttt aaaaaataag gctgggcgca gtgactcacg
387001 cctgtaatcc tagcactatg ggagcccaag ccggaaggac tgcttgagcc
387051 cagcagtttg agaccagctt gggcaacatg gcgaaaacccc atttctacaa
387101 aaaatacaaa aaaaaaaggc caggcacggt agctcactcc tgtaatccca
387151 gcactttggg agaccaaggt gggtagatca cttgaggtca agagttcgtg
387201 accagcctgg caaacaatg gaaccccatc cttaactgaa aatacaaaaa
387251 aaattagcct ggcggtagtg gcqcatgcct gtaatccag ctacttgagg
387301 ggctgaggca ggagaatcac ttgagcccg gaggcagagg tggctgtgag
387351 ccgagactgc atcactgcac tcttgtctg ggtggcagag tgagagacc
387401 tgtctcaaaa aaaaaaaga aagaaagaaa gaaaaaaata aattattagc
387451 caggcatggg ggcgcattgc tcagctctca gttactcagg aggcctgagg
387501 gagaggattg ctggaaccga ggaagtcaag gctgcagttg agcccgagtc
387551 caaacgctgc actctaacct ggtgacaga gggagaccct gctcaaaaa
387601 gattataaaa ataaacaaaa aggaacaaga tgcctccaa acgacacctt
387651 gtgcctctta caaaacagat ggagaaggga gtcataagaa gtcaagccat
387701 ataaagccat acaagcaggt aagtaaat tcaaaaaatc cagaagcagg
387751 ttttctggga attatgaacc atatacaatt agccttcaaa atgtttaatt
387801 ttacatgaca cagaattagc caaaaatatg actcaccacc ttttaaaaa
387851 caacacaaaa ggt-aagacat tcaaaaaccac caactctcct gacagcaga
387901 caattattctt aaaaatcata aacaaatatg ggcaactctg cctaagggtt
387951 ttggtaatct actgcaagat caagctaacc ttcataatga tggggcatta
388001 ttatacgcac tgaacttacc cagtgctaaa cactagaag ctttatatta
388051 caaggtattt ctccaaagac ttgtctatta agagtcaatt caagaaatag
388101 gtcatgtatc ttacatgtcc ataccataca taaaagaaaa aggcattccc
388151 aacaggcttg gttaggttgtt acaacacagag tgctgagccc tgtgtccag
388201 gtttgctttt aaaaatcagtc agtatgcagc ctgtttgtgt ttttgagcct
388251 gggtttcccc caaacctaga aatttgtcat ttatgttca agatataatg
388301 aagaagctgg gggatttctt caaccataca gaacacaga ggcagtaata
388351 ttggccaagc aagtaattat cctcagcaag acaatcaagc aaagctaaca
388401 gcaggaaaaa agaaacgaat aactatcctg aacctgcttt gtctagacga
388451 ctgttaatta ggtagcttcc atacattatt tcatttaact tctgtaatac

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FIG. 1 CONTD

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388501 tcttgtgagg aggagactgt aaaccatttc tgacagatga ggactggaggc
388551 tcaaaagtga aatgacgcc aagtcacaca gcagaccctt ctaatttttc
388601 ttatggagaa tatcagtcct ggccttgaa ggcgtgaact tcctcaacaa
388651 cttcagtgaa ctccctaag tcacttcttt ctgactttat cttgccttgt
388701 aaatgtacag cagcatctgt ctttaaactg ttaccaatat aaaaagtgat
388751 caggccgggc ggggtagctc acacctgtaa tccagcact ttgagaggcc
388801 gaggccgggc gaccacctga ggtggggagt tcgagaccag cctgaccaac
388851 atggagaaac cctgtctcta ctaaaaatac aaaaataacc aagcatggtg
388901 gcacatgcct gtaatccag ctactcaaga ggcgtgagca ggagaatcgc
388951 ttgaacctgg gaggtggagg ttgcagtga ccgagattgc accactgcac
389001 cccagcctgg ggaagaagag cgaaccccca tctcaaaaaa aaaagaagta
389051 tccactctcc caataaaaag catccgcaa aatgctctgt cctagetttg
389101 cctggttaaa cctcatgaat gtcatttatt cctgcacttt tgcataaccc
389151 attgagaggc aggcctagag aacacatgtg acctctgtcc tcggagctca
389201 caacatacaa ggtgcattct tggcctggag actgctaagg cacaagtgt
389251 gtcttcatta gaccatgcct gctcaacctg ggcagctgag aacatgaact
389301 ggcattccttg gaattcagac aaggttccct gagaggtttt gtggggctat
389351 gtgccagcca gaacacagag acaggttctt taactgggc gcgtggcatt
389401 tccctcttaa ggcagcagag cgtaaactgt aataccacca aacatttcta
389451 atttactcaa aattaccacc atctcatta taattgact attgtgggtg
389501 ggtctttaa tttccattt tccctggagc agtggcactt tttactactt
389551 ttaagaaac cacattaagg atcataatta tatcaacctt aagaagaatt
389601 aatgtgtata cactatcaat ccaataaact aaagcaggtg caatctaaaa
389651 attaatgagt atttcatcgt tgataaaatc taactgacag ttaagtgata
389701 tgcggttaac aatgactcaa aaatacagga tctgccaggt gcagtggtct
389751 acacttgtaa tccagcact ttggggaggtg gaggcagcca gatcacttga
389801 gtccagaagt ttgagaccag cctagatgac atggtgaaac cctgcctcta
389851 caaaaaatac agaataatc caggagtgtg ggcctgaccc tggltgtcca
389901 gctacttggg aggcctgaggt ggaaggatcg ttgaacctg ggaggtggag
389951 gttgcagtga gccgagatca tgccaactgca ctccagccta ggcgacagag
390001 cgagactctg tctcagaaaa aaaaaaaaaa atgcaggatc cattgcaagg
390051 aacagcaaca ttatttagga cagctctgat atcatgacat ctattaaatt
390101 tgcttaaaaa tgaagaaaa gtattacag acttattcta actatggatt
390151 tcatttcaaa ggaataaaa ttagtttcaa ctaaaattca tttaaataat
390201 cattccaggc tgggcacggt ggcctgacacc tgtaatccca gcacttttgg
390251 gaggcctgag caggcagatc agttgaggtc aggagtttga gaccagactg
390301 gccaacatgg caaaacctgt tctccactaa aaatacaaaa attaccocgg
390351 gtgtgggtgg ccaagctggt aatctcagct actcaggagg ctgaggtggg
390401 aggatcatct gagcccgagg ggcagaggtt cgagtgaacc aagactatgc
390451 aactgtcctg agtgataaga gtgagactct gtctcaaaat aatagtaata
390501 ataataatca ctccagaggg ttgcacaata atttagatgc ttcaaatagg
390551 aagataatga gtgattctat ttgtgttcta tctcgttatg aaggaggcac
390601 tgctaatgga aagaaccttc aactggccta ttcagccagg gccctccctg
390651 acagtcgaag accttggtta aactcctgag caagtgacc caactctctt
390701 ccttccatgt gtgctatggt ttgtccaaat tataagcacc ccccaaggaa
390751 gcatcccaag agaagctgcc acccaaacac gtatcacgc taaactatgt
390801 gcacatccca aattcaaaac aaaaccacaa aaataaatgt accctgttag
390851 acttagttag cttagctatg ttataaaaaa atatgtccct tatgataca
390901 atttttctaa agtataatat atacagaat gtatacaca aaatatatct
390951 ccatggagag attacaggtg gcatcatttt ctttctttgt atttttatc
391001 taatttttgg cctgccaatc ccaactcttt agtttgttgg ttgttgttgt
391051 ttgtgcagca gggttgtggc cagaaaaaaa gtccatcag gtatcaatc ttttttttt
391101 cacttccctt tagaaaatta gatcaaatc ctactctttt ttttttttt
391151 tttagatgg agtttgcctc ttgttgccca agctggagtg ctgtggcaag
391201 atcttggctc actgcaatct ccgctcctg ggttcaagca atctcctgc
391251 ctacgctccc caagtacgtg ggattacagg cccccacat cagcccgagg
391301 taatttttga ttttttagt agagacgggg ttaccatgt ttgtccaggc
391351 tggttctaaa ctcccgacct caagtatgcc acctacctcg gcttcccaaa

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FIG. 1 CONT'D

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391401 gtgctgggat tacaggcgtg agccaccgca cctggccttc ttgtattttt
391451 taaaaatag tcccaaattt ctctcttttt tttttttttg agacagagcc
391501 tcgctctgtt tcgcagcttg gagtacactg gcacctcttt ggctcactgc
391551 aaactcccc tcactcagtc aagcaattct tgtgcctcag cctcccaggt
391601 agcttgaatt acaggtgtac accaccatgc ctagcttaact ttgtattttt
391651 tagtagagaa ggggtttcac catgttggtc aggtcgtctt caaactcccg
391701 acctcaagtg atccaccac ctgggccttc caaagtgctg ggaattacagg
391751 cgtgagccac cacacctggc ctctcttgta tttttaaaaa atagtcccaa
391801 attctttttt ttgggggttg ggggtggaca gactctcact ctgttgccca
391851 gtctggagta cactggcacc atcttggctc actgcaacct ccactcccc
391901 agttcaagca attcttgtgc ctgagccttc tgagtggctg agattacagg
391951 tgtgcaccac cagcctcggc taatttttgt atttttagta gagacgggtg
392001 ttccactagt tagccaggct ggtctcaaac tctgacctc aggtgatctg
392051 cccacctcag cctcccaag tgctgggatt agaggcgtag gccaccatgc
392101 tcggccagtc ccaaatttct ataaccaaca ctttgtgacc aataaaatga
392151 acaaatattt ccaatgaaaa taaaagtcca attatttgaa ttatgtttta
392201 cccttaggct gttagaagtt ttaagtgtta ttcttgcttt agattcataa
392251 cgtagagttg cagaatggtt caggcaaat ctgaaaaat gaattattta
392301 tataaaatta aatgtagatg qtgaagaatg aagtgataac agctgtcata
392351 gaaaaccaga tgggtatctt ttaaaaaaaa aaaaaaacat tagaattata
392401 ttatctagat aaactccatt tctagcatai accccaaga actgaaagca
392451 gagacttgaa cagatagttg tataccaacg gtcaaacgac cattattcac
392501 aatagccaaa atgtgaaaaa aatccaaata tccatgaaca gatgaatgga
392551 taacacaaaat gtgtgtctaca catcagatag aatattatc acccttagga
392601 ggaatctg atacatacaa caacagggat gaacctgaa gacattatgc
392651 taataagtta gacaaaatt gcatgatctc acttacatga ggtacctaga
392701 acagtcaaat tcatggagac aaagttagat tgtgggtgcc aggaagctgg
392751 gggaggtagg aatggggagt tactgtttaa tgggtacaga gtttcacttt
392801 ggggtgatga aaaagtctta ggcaacaat atgtgaaaaa atattcaaca
392851 tcactaatca tcagagaaat ccaaatcaaa acccaatga gatactatct
392901 cacaccagtc agaattggcca ttatcaaaaa gtcaaaaaa aagatattg
392951 gcgaggctgt acagcagagg caacactata cactgttagt gggaatgtaa
393001 attagttcag ccactgtgga aagcagtttg gagattctc aaagaactta
393051 aaacagaaact accattcaac ccaggaatcc caagactggg tatacatcca
393101 aaggaaaaata aattgtctta ccaaaaaaaa aaaaaatga cctgtatggt
393151 catcacagca ctattcacaa tagcaaaagc atggaatcaa cctaggtgcc
393201 cgttgacagt agattggaaa aagaaaaatg ggtatatata caccatgaaa
393251 tactacatgg ccataaaaga gaacaaaatc atggaatgag ctacaggcca
393301 ttactctatg tgaattaaca caggaacaga aaaccaaata ccacatgttg
393351 tcacttagaa atgggaacta aatatagggt acacgtggat ataaagacag
393401 gaacacaga cactggagac tactacaggg cgaggagggg aggggtacac
393451 aggtctaaaa actactatt ggatactagt ctactacct ggggtacgga
393501 attattcgta ctccaaagct cagcatcaca cgctataccc atgtaaacaa
393551 cctgcatatg tactccttga atctaaaaa aaagttgaaa ttgggtcaga
393601 tgtggtggt cagcctctga atccacgat tctggggagg caagacgagc
393651 agatcacagc gtcagagatc gagaccaatc tggctaacac ggtgaaacct
393701 cgtctctact aaaaaacga aaaaattagc cgggtgtggt ggcggggacc
393751 agtagtccca gctactcggg aggtcgagga aggaagaatg catgaacctg
393801 ggagggcga cttgcagtga gccaaagatt caccactgca ctccagcctg
393851 ggagacaggc gtcgcaaaaa aaaaaaaaaa aaaaaaaaaa aaagtgtgag
393901 atgatttttt ttaagtatgc tagagattga tgggtggtat gattgtacaa
393951 caatgtgaat gtacataatg tgactaaaat gtgtaattaa aaatcattaa
394001 aatggttaaa ttacactat atacctttta ccccaatttt ttaaaatcaa
394051 ataactcatc ttgtgggttt tatcaagact gcaattataa actcaaaagt
394101 acatttctaa aattaaatat agaaaaggtt cagtcctaaa aaatgtgttt
394151 ggaanaagtaa aatcatactg ttttaatcat gtcttgagaa tataagttcca
394201 gattagggaa attctcaacg gagcatttat aaaaagaata tagcctcttc
394251 agaattttcc agtgcataca gcaatttaaa ccagaccaaa caaatctcta
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FIG. 1 CONTD

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394301 agatgacagg tccctccagg gcttgtcatc ttgataatta taaaatgat
394351 gagctgtaat tagaatgtca gtcatcttta aatagttact tctgaagtac
394401 ctcaactaaga tagtaatttt ttgtcaagcc ttccatgttt tatttaggaa
394451 atactttctg aaaaacaata ttaatgtgtt gcagcctgaa ttaccactct
394501 ttatgagtta ttattaggtg aatcaatgac ttttttttt aactgtataa
394551 agataaaaca aggggtcgaag gaaagaaaag aggaacgcga aatgccaagc
394601 agaggtagaa agagtgtaac gtctttaaag ataalatgcc aaccacttg
394651 gctcttcgta ttctctctgg cacttgaaaa tcatctctgt atccccactg
394701 cacttatcct acgtccatta gtccacaga tcaatatccc attccctggg
394751 atggcttctc ctagctattg gcactgtccc ctagagaact tgtggcatga
394801 ggaagaaaag gttattttac ttatactctt gaaagcaaat tcagtcagga
394851 caaacacagg ctttccaatt ttagaactct acattagaaa ctgggaagct
394901 gaaggagtaa tgtagcaact aatcttttaa ttccctcctc agcacattta
394951 ttttactttc cccaaggaac aatatattaag gaaagcctaa tttttttt
395001 gtttttttta ctgactcagc aaaaatatat ttcaacatgc ttatggagat
395051 tttaaaaaca acaggaanaat gagagaaatg gtacaggaaa actggttttg
395101 atgaataaat gttctcaata ttaacaaca gtgaaaattt agggttgatc
395151 ttgaagcaca tggacttcac acagacctca actaaccaga atgtatttgt
395201 ttgggctagt ttaatttgtt gttatgtact ggccttttaa tgcacccaat
395251 agggattctt acctttagat ctggcttcta ctgaccttag agctaaggaa
395301 aagagtggga aaagatgaag caatccttca gcaatggcga gcaccaagat
395351 tctgacgctt ctggtgtcat tttagaagca tgaataggtt ttgtgtcatt
395401 ctltatttatg gaagccgata gccagagggaa actgggaagg ctctgaatgt
395451 tggaaacaatc attttaagta gccctaacaat tcttcagcat acaagctaca
395501 gcaagcttta aactactcaa aacagcaact tctaataatgc aaaaatgat
395551 ttttaattgc aaaaactttg aattaaagca ttacacata cactgaaaat
395601 tctaataaga ggtttctcta tttttgtaaa ctgaatgggt gatgtattta
395651 ttatcagttt taagttgcta agctgtctta cgaaaaaaat ttatttatag
395701 ttaatgagct agtgataaaa tctaaggagg ctgggaaaaa agtactattg
395751 tatgctaatt tgaacaaaaa ccaagttgtcc ctcaagtatc gtgggggacc
395801 ggttccagga tctcctgcag atactaaaaa ccaagatgc tcgaagtcct
395851 gatagaaaaa ggcatagtat ttgcacataa cctcacaca tctcccata
395901 tactttaaat gatctccaga ttactataa tacctaatac aatgtaaatg
395951 ctgggtaaat agttgttaac gttttatgct tggggaataa tgacaagaaa
396001 aaatactcta catgttcagt acaaatgcaa ttttaatat ttgcaatttg
396051 aggcgtggtg aatccacaga tgtggaatcc atggatacag agagctgact
396101 ttaatagcat acattaatct ttcttctgca atgacccacg ataccaacaa
396151 tgccagggac atcataaaga atacaatcat ggtctctgcc tctgaggaa
396201 tgaaggtcta atggaagtc agatcctaag taagtggaaa actagaatgc
396251 aaatacaact ggaataatta aggaatgaa ttatcatgc aagtatatgg
396301 tccatgtgac acatgttaat atgtcaataa ggaataaat atgtgcacaa
396351 tagtgacaac tatataaaaa ttgtatataa cagaaaaaca ttacacgaaa
396401 tcccagaaac caaattctcc atattccagc agatgataaa atgtgagcct
396451 ttctcagtg agaatcatcc agtttctcag aagaacaaag tgttcttcat
396501 agcctctctc ctttttagc aataaatgtt ccaattgagc acaaaagatt
396551 gaaggtatg acaatcttta ttctgaaic catttaattc cagaaaaaca
396601 ttcaataaag agagctctac ggtttggggt aactttgtg atacaacatt
396651 acaacttaat gtcttccatc tatgtctacg caaaagcaat tcaaaaaccc
396701 tctcaaggta caaacagcca aatgttaact ttaccaattt cttacata
396751 attctgatgg gctttttgag actgagcaaa tctgtctca ttgagatacc
396801 aaatgtattt cccaggtcca gataagctct taagaatcag cctcaaacct
396851 ttttaataaa aaataaaact taaccattt tcaaccaactc tatggtataa
396901 gggctgcmaa tcacaggcaa agtttcaag atgtgtcag acactaatat
396951 gttattgccc cagctgtgag aacagctgtc atccaagctc ctcttctgca
397001 aacacacagt actacaagaa tgaaggagg gccggcgctg glggctca
397051 cctgtaatcc cagcactttg ggagggcgag gcaaggcgat cacgaggtca
397101 ggagatcaag accatcctg ctacacagc gaaaccccg ctctactaaa
397151 aatacaaaaa aattagccgg gccctggtagt gggcgctgt agtccagct

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FIG. 1 CONT'D

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397201 actctggagg ctgaggcagg agaattggcgt gagccccagga ggcacagcctt
397251 gcagtgaacc gagatgggtgc cactgcactc cagtttgggt gacagatcga
397301 gacttgtctc agaaaaaaagaa aaaaaaaagaa tgaagaagaa aggaagaatg
397351 cccgtgaatgc ttgactaagg agtctgagaa ttagccttc tcaccaagta
397401 gtttgtcatc cttaacagtg aagccacctg tacaggtgag tgaagataat
397451 acccccacct tcatttagag aacagtatga ctagtgtttt agaattctct
397501 gattgtgcctt accctttgtt tcataagttt tgttcaaatt catcactaat
397551 tttagaggaa aatgtaagtt cctacaactg tcatttccca accactaata
397601 agttatttga cttgaagcac aatttgcaat aatggcctct gtaagcattt
397651 ctttagcccc atcatccaag gggctgcctt catctcattc atttcactc
397701 gtctcacttc taacctcagc catgtgctcg aaaagcaaac gaaccaagtg
397751 gcaatagcat tagcagtgaa aaaaaataca tatctagggt tgtgcagctg
397801 actgagatct tataaaagta ttgcttttat aggatactgt tgttttcaaa
397851 aggaaccagg aaaaagaata tcgatgatta gaaataatgt tttttctgta
397901 agtttgttct ttgttaaacc aaacaacacg gtgtcacaaa acagaacaaa
397951 aaaaccaatg atgggtcaaa gtttaagaaa atggaatagat ggctgggtga
398001 agtggctcac accgtgaatc ccagcatttt aggaaggcga ggcaggaggta
398051 tcactttgaac caagaagttc aagaaccagg tggccaactt ggcgagactc
398101 catttcccta ccaataaaaa gattagccag tcataatggt gtgcgctgtg
398151 agttagtccc agctaactca gaggtcagg tggaggatc accgtagctc
398201 aggaagttga ggctgcagtg agccgtgttc acaccactgt attccagtct
398251 gggcgaagaga gcaagatcct gtctgaaaaa gaaaaaagaa atggataaaa
398301 cataatactt cattttattt tccaaatgaa tcaaggctgt gaattgggtg
398351 gtcaaatctca aatctaaata tggtttcatg aatctttctc atgttggtag
398401 cccaaaatgt atttcatcta ttagtcccca gtgtgatgaa aagtatcaac
398451 tgtacctctg aatgacctaa agccaaaactg aaattccagc aatggactgtg
398501 cagaaccata cactattaat tcaataaatt ttcttaagta aacaggacac
398551 agagccaaca ccaacagaaa ttacatgggg ttggggggtc tagacacata
398601 aacagatgct cacaacagtg ttgctgttca gatgctgtg aggcaacaga
398651 attgggaagt atgcttcagc tacctaaaga gaagcagcgc cctgcaacag
398701 tgagcactca tgccaggtaa ggctctggtg gaggaactga aagaaagtca
398751 gcattggctgc agccaaacaa ctcaggcttt atcctaaag caccaggtaa
398801 tccctgaagg gtcttaagca gggaaagtgc ataaacagat gttagtctat
398851 gaaagattac ttggctgac cacagagaca tgagacgaca aaggagtgtc
398901 tagagggaat ccagatggct atggtaaagg agaaaagaa ggtattgaagc
398951 ccacactagg gaaatggaga aaattgaaca agaaggaaaa tcaagaagat
399001 tctgcaactg gctgaatggg acaaggagca ctggaataagc agaaaggcag
399051 agccgaagat cacaggcaga cgctgagctt gagtgaagaga gaactgtgct
399101 gccactcact acagcagaaa gcacagcagg cctcagggtg gatgagctct
399151 actatggaca ttgtgccag gtacctgtgg gatattaaag tggacaagtg
399201 ccaacagatg gatttagaaa tctgaagctc aagaaaggtc tggattggag
399251 atttggaaat ctggcatgaa atcccccagg aaaaaagcaa gtgaaataag
399301 gagagcagag taccttaaga agaactctaa gaaactccaa cgggaaaggg
399351 acagggagta cccoctagaa gggactgtga aggaagagt agacacagag
399401 gaaaaccagg agacagagtg tcacagagat ctgggggact gagcatcaca
399451 ggcaagaggc atgctatgtt cgaatgtctg tgagacacca aacaggggaa
399501 ggggtggagaa acctccattg gatttaacaa ggagaattat cagtgaacctt
399551 aacaagaaca gtttcaactg ggttgtgggt ggaagaggcc aggttgccagc
399601 aggttgaggc gtagtgtgaa ggtgagaaaa aggaaaccat gagtataaac
399651 aacttgttca agaaatttca ctctgaagga aaaaatgaaa atcgcatagt
399701 aatcacagaa ttgtagagag ttgcaggacg ttttctgtta accttttaa
399751 tgaataacatt gttagaggtc tgaacatgtt tgaattaatg ggaaggagcc
399801 agtagaaca ctaaaagagg agggatgtaa caactcaatg ggccttaaga
399851 aagtgcagg gaatgggatc tgaagcagaa gtgcaacaga agcccgccggc
399901 gcagtggctc atgcctgtaa tcccagcact ttgggaaggcc gaggcaggtg
399951 gatcatctga tgtcaggagt tcgagaccgg cctggccaac atggtgaaac
400001 cccatctcta taaaaaatc aaaaattagc tgggcatagt ggtgggtgcc
400051 tgaatcgca gctactcagg accctgaggc aggaagaatc ctgtaactcg
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FIG. 1 CONT'D

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400101 ggagacggag gttgcagtga gccaaagatca caccactgca ctcacgcctg
400151 ggcaacaaaa gcaaaattct gtctctaaat aaataaataa ataaataaatt
400201 gcaagagaaa ctgtgaaaag gagcaagtct tccttttctt ccctccacaa
400251 gaggagggag aaagggtgaa tgtgaatgaa agccagttta aaggttagga
400301 atccagatgc tggagacata ctcatctctc cattctcatt ctctctcccc
400351 gctgagctct cattttacat gccaccgcgc aatgtacaac agtgcgtctt
400401 tctccagtat ttactgtctt ttgtattata cccatctcag tggatgggag
400451 gtggatatctc atggttttga ttggcatttg gagaccattc tcttctgagg
400501 tcacctattt ttcccctatg aagaaaagat taggcttttt gctaagagta
400551 agagggggagg tagcaataaa cagtggagtg gagggccggg gtggttgctc
400601 acgcctgttaa tcccaacatt ttgggaggcc aaggggggag gactgcttga
400651 ggctaggtgt tcaagaccaag cctgggcacac ataggagagac cctgtctcta
400701 caaaaaataa aaaaattagt cgaatgtggt ggtgcgcacc ttgtgtccca
400751 gctacttggg agtggggagg atcactttag cctgggagtt tgagggclga
400801 gtgagctatg atcacatggc acactgtact ccagactggg cgacatagtg
400851 agaccctgtc tcaaaaagaa aaaagtggag tggagcaatt gggggtaaaa
400901 tggtagatgc tgaagcagtc aagaccaagc ccagagaaaag cttgagacga
400951 gagaacacta gcagatgggt tctggtctcc ctgtgaactt ttctgacccc
401001 taagtcttta gaggtacca tctggtctcc ctgtgaactt ttctgacccc
401051 aggsaaagag tgtgcttttg tgtatgtgtg tgtgtgtgtg tgtgtgtgtg
401101 ttttlaattg gatctaacac acagtgtact tatataatta tttcatlaac
401151 tgatctccct tactaagtct attctggcta aattcagaca acactcatca
401201 tactccctct gtgcattctt cagcacgtac caacatgta cttttttttt
401251 ttgagatgga gtctcactgt gtcccccagg ctggagtgca gtggacaaat
401301 ctgcgctcac tgcaacctct gccctcccag gtccagtaat tctcgtacct
401351 cagcctcctg agtagctggg actacaggcg cacaccacca cgcccagcta
401401 attttttgta ttttttagta agacggggtt tcaccatggt ggccaagctg
401451 gtcttgaact cctggcctcg tghtaactgt cgctcactc tcccaaatg
401501 ctgggattac agatgtaagc cactgcgctt ggccaatatg taacattttt
401551 aactttttgt aaaaccagag atatatttga aatgtgtccg aatgccttgc
401601 ctagattcta gactctgtga ggcgccagcc tcttttcta tgcatgactt
401651 actgtttaat gtagtacaca cagaagggat atcatcatca taataaagg
401701 cctcactttc cttcacagtt tcatctaccc cacaatgact ccaggagaaa
401751 ggagggtact gtttcagact tcccagctcc cgtatattag gtggagccaa
401801 gttcttctg cagcatacgg gcaagcttta aaattttcaa atcatttttt
401851 aaaagctaca agcttgacag ctttgggttt ttatggctac ttgttttctg
401901 aagttcacag aactttatca ttgtgatcac acacttaaaa aaatcacttg
401951 caaaaatctc tttaaagatg aatatgtctt ccttcaaga gaacagactg
402001 agcgggtaga agaaaaagga cccgtctaga gtattataaa atagactgat
402051 attcacacaa tggattaaat ggaattaaat ccatccacca gatgaactgt
402101 tatattaata gaatccaaat atacagttac atcctcgacc ctgaagagcg
402151 ttttaacggg tgaatttcac ccaagtctca ctgaaatga gtactctaaa
402201 gtttaagaca cctataaact gccctcagga ttcaatcatt ttccattcc
402251 ttccggcatt atatactttg atgttttaat gttattagcc caaatacac
402301 accagtttca gaaactcagt tttgtctctc taagggcttt tagtctccc
402351 aaaaaagaaa tagggcaaaa gcaaggaaag tcatgaatct ggtttcttaa
402401 aagcattatt acaagactgc tttataaaat tgaatcccc agctgcagag
402451 ttccgcagat ggcttgaag ttgtttacat gcaaatataa aaaaaaaaa
402501 ggccacttat gcgagcagaa caCagcgtgc tcatagatca tcttaaacgc
402551 agcaggtagg tactttatca gaggcagaca agggaaacgt cacttattta
402601 gagtccaccg cagcctcggg taaaagtcct cactaacaac atccctgctt
402651 ttgtggattc ttgtcggaaa agggaaacga taagaatat ggtttgtgac
402701 agcactactc tcaggagagc aaggagagat gctaagatct tggaaaaggag
402751 agagaatagg aagagtcgga ggggagatct cctctcagta aaacggcacc
402801 cacagcagtc agacttcagc tacgagcaaa atcgagtcgc tgcaactcaa
402851 aaaaagagag gaggcaggga aaactttccc tcgctctccc ccatctcttc
402901 ctctcctcgc caggagagca cat tagctga ggtgctggcg ggggcggggc
402951 cggggacccc atccctcgcc ccgagcgcag gccccgcagg gactccccgc
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FIG. 1 CONT'D

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403001 gagcccgagc gagggagcgg gagggtacag gagtaacggg gcactcccg
403051 cccggcctcg ggggaaaggga agcagggggca gggccgaggg ggaagagagcc
403101 tcgcgagact cgaccccgcg cccacacgct acctgcgagg tcagctgctg
403151 ccgcgcgctc ccgcgggacc gcaaggatct ccgaagctcc aatggcgcca
403201 gaagtgcgag cgagcggcgg tgcgccacgg cagcgaagag gaggagcgcc
403251 agggcgccgg gccccggcgg tcacgtggcc ccggccgctc cagctgaccc
403301 ggtgcagcgc gcgccgggga cgctaccagg ccgagcatcc cgcacogccc
403351 cggccccggc cccgscggaa accctgctct tcggggccct caaccogact
403401 tctttagaag ccgattggcc gctcagggcc cgccccgagg cccctgccat
403451 ggagtgctcc catgaattcc ggtggctgct gcggggactt agagggcttt
403501 gtgctgagg aaccaggaa cgcggaggca cgggctcctg ctctgctccc
403551 cgagatggct tggctgggg gagggtcgcc ctaccacccc agagacctag
403601 gacggaagg cgaccgagaa acttggctcc ctgccactc tagagcgct
403651 ctggccccgg ggcaaccacc aggtggtgct gcctgggagg aaaggcgcg
403701 gagctgggac taqgtttgtt ttactggaga cgcgctccc tcctccccg
403751 cccctcactt cctgattgaa agtacctgag cgaggccagg gactagggaa
403801 ggtggcagct ggacaaaggt atgaaggagg gacgagatga ggcacaggtc
403851 ctggtattgg aaagaggcag aggtacctcg gaagcatgcc atagaggtta
403901 gacgggacct aagagggcat ctggtccaac cggattcgtg ttaccagcga
403951 gtaaacctgag gccaggagag ggactgctac gagctgclcc agcctalac
404001 ctataaagac tacagtcctc ttgtaaaata ccatacagct ctcgggagac
404051 tcccagttgg cgctgcaggg taaaaatccaa acttgttggc atagcattcc
404101 agccacttgt tcacttacct ttcccatttg agctcctagg aataaacaga
404151 aaaaactttc attttctaaa tatcacaga taacttacct ttgttaact
404201 tgaattatta aaaaagtcct accgtccctc atctcttgcc acttcccaca
404251 cacttactgga ggctctggct acaataaatt tgttttctt gactactcaa
404301 ctttctttgg attatttact ttctctctaa gtttctttaa tctttttgc
404351 ttgttctaat cttttgtctg tatctgaaat gtcctgaatc accacctccc
404401 ccacttaaaag aaaaccaggg ccaatgatta aaaaaaaaaa aaagggtta
404451 aagaaactaa tgcaataaga gaattgagct tagttctgta tctattctga
404501 ggtctcgctc ctgttgcaat agtctctgaa taaaatgitt ttaccacttc
404551 aactactggt ttgctctggt ttcttcaaac agcctccaaa gtacacatca
404601 gtttctact catcttctaa aatccaggtc aaatgccgcc tactctgtc
404651 ttcccagcat cctcttccct gattttttag caattgaagt tcatccagac
404701 agtgtcagct gcaactctt cccctgattc cagaatacta tatatattct
404751 gatacacctc acactgccca gaaatagact gcgcatttcc tgtaaaaggt
404801 gaattgtcta ttgctgtctt ctcccttaga ttataaactc ttgtaaaacg
404851 gattcttctg ggtttagaac agcgcttgcc atgtgtatga ccttaatac
404901 tcaactgaatg aagtggttg cccaagtag tggcagttga gtgaatttac
404951 tagaagaggc ctgttttgct caaagaaact aaatcagtt tcttttggtt
405001 gcaaccggat caaaagaact ttgttaaa ca tctctgagag aaaaacgagg
405051 gcatgggggt tgagcaatca aatatgctct gagccctcac tgcttatgtg
405101 tcagatgcc aacttggagg atcttggagg attaaaagct gaatgagaca
405151 tggltgctga taaggaaagt gtagtctggt tcattattcc agtacaggg
405201 gaaaagtatt atgatacag gtgctaagtg aacacaaacc agggaccaca
405251 aatcagggag tcaggggaga acttcatgag aaggtcagtt ggacagggaag
405301 tagataagaa gaagaagaaa gacattccag gagagagcaa tgtgttcaaa
405351 agtagtgaca catgaacaag tactatttgt ttaggaaaaa acaaacaggt
405401 aggtgcagtg gctcatgct gtaatccagg gccaaaggcg gcaaatcact
405451 tgagggtcaag agtccaagac cagcctggcc aactttgaaa aaccctgtct
405501 ctactagaaa tacaaaaatt agccagctgt ggtggcacgt gctgtaatc
405551 ccagctactt gagaggtga ggacaaaaa tcaactgaac ccaggaggca
405601 gaggttgtag tgagccaaga tcgcatcact gcaattccag ctgggtgaca
405651 gagtgagact ctgtctcaaa aaaaacaaaa caagtaaccc tatattgat
405701 ccttgatgac tcatttca ca tctaggataa aggaacacca attaggttaa
405751 ttttaataata ctgaaagaa tgacataatt actggtattg gtgtatttta
405801 ttgtattgaa taactttcta tcaggacat catagctct gcatctaaaa
405851 ttggcctagg ccaggcacag tgggtcacgc ctataatccc aatgctttg

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FIG. 1 CONT'D

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405901 gaggccaaag taggtggatt gcttgagccc agggagtcca gaccacgctg
405951 gacaacatag caagacgctg tccctataaa taataaagaa taaaactggc
406001 ttggactaac gcgegggtgat tttttacctt tttttccagc ctcaaaagct
406051 ttctatgatt atttctgtaaa aataccataa ttctttgttc caaagaagat
406101 gatttttttt attttttgag acacgctctt gctctgttgc tcaagctgta
406151 ctgcagtgcc atgactcataa ctctcgtcag ctccaacctc catgggctca
406201 agtgatcttc ccacctcagc acctcagcct cctgagtgc taggaccaca
406251 ggtgagggcc atcaggctgg gctaatttat attttctgtg gagaaggggg
406301 ttgccatggt ggccagcctg gtctcgaaact cctgagctca agcagtttgc
406351 ctacctcagt ctctcaaatg gccaaagatta caggtgtgag ccacctagcc
406401 tggccccaata gaagattatt tttagagcact ccaaaccttt cctt tagagc
406451 aaaaataattc aattaacagg tagtacttta agacagaaac tgggcttaac
406501 ctccagcatg tgaaaaggga gaacctccc acttaalgct aacacatgat
406551 tacgttggga aaagtacctg tcaagaacct aataaaatat cataaggttt
406601 gtccggacat ggtggctcac gccctgaatc ccagcacttt gggaggccaa
406651 ggcaggtega tcacttgagg tcaagagttt gaaaccaagc tggccaacct
406701 ggtgaaaccc tgtctctact aaaaaataaa aagttagctg ggtgtggtgg
406751 tgggacacctg taatccagc tactcaggag gctgagggtg gagaatcgt
406801 tgaacctctg aagcagagat gcagtgagtg cgagatcatg ccactgcact
406851 ccagcctcgg caacagagta agagtccttc tcaaaaaata aataaaaaata
406901 aaaaatgaat aaatgtctt ctttgtcctt tggcaggcaa aatagctttt
406951 ttattttttt atttttattt tttagacagc ggtctcgccc tgtcaccagt
407001 gctggagtgc agtgtcatga tctcagctca cgtcagcttc cagcttctgg
407051 acttaagcga ccttcccacc tcagcgcgcc gagtagctac gactacagat
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407151 ctcaactattt tgtccaggct ggtctgaaac tctgaaaccc aacggatcct
407201 cccacctcag catcccacag tctgggattt acaggtgtga gccactgtac
407251 ccagcccaag agagcttctt aattatggaa ttcttcaact gtccatgtca
407301 gttgatggtg aaatgttat tttttatcca tttagcagtg tcttgttcc
407351 acctgcattt agctgtggtt gcacctggc ttattaggag gtccaccaat
407401 tctggtggga gatcagcagt ctctagtctt ctgagacata gaagtcttga
407451 ctgcaattga ctatgaagca ggaactggtc tctgaatgtt aacatgcac
407501 ttgaagactt cttagagtga cctcgggatg atgatggagg tagtaagaat
407551 attctcagat ggggcttgac tcaactcatt ggaattataa aggtgaattt
407601 acctgggaca aactcagtga ctttatgagg aaacaatcag agaaatacat
407651 aatagcggac aagaaccttt ctacgcttgg ttctctcaaa aagttaattt
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407801 ggccaacatg gtgaaacctc atctctacta aaaaataattt aaaaagttag
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407901 caggagaatt tacttgggag gctcagtcag gagaatcact tgaaccagga
407951 ggcaaaagtt gcagtgaact gatcacgcg cattgcaact acccttgggc
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408051 gggttzaaaa aaagaggggg actgttctag attaaaagag actaaagaaa
408101 catgaatttc aaatgcagt catgaacctt aggtagaatc ctggttccaa
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408201 cagtggcacc atcacagccc actcagcctt caaactcctg ggcctcaaaa
408251 atcctctggc ctggccctcc taaaaggttg ggatcacagg tgtgagtcac
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408351 taaagaatca gaaatttaat atggaactga tattagatag tattaggaga
408401 ttactggggt ttttagatgt ggtaatagta attataagaa catctcgctt
408451 gggcatgggt gcttatgcct gtaatccagc ccctttggga ggctaaggcg
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408601 atcccagcta ctggggaagc tgtgggtggga ggaattgctt agtcaggag
408651 gtcaaggctg cagtgcagta tgattgcacc actgcactcc agtctgggca
408701 acagagcaag acctgtgtct aaaaaacaaa aaacaaaca aacaaacaa
408751 aaaaacaaag aaagaatgtc cctattttta tgagatgtgt accagataaa

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FIG. 1 CONT'D

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408801 ttaaggacag agtgtaatga ggtctgcaaa tggttcacac aaaaaattaa
408851 tactgtatat atccatgtcc ataaagaaa agaaaatatg gcaaaatggt
408901 tgcaattggt aaatcgagga gctattattt atacttttat ttaaaatttg
408951 aaattttctt tctttttttt tttttttttt tgatatggcg tctcgctctc
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409051 cctctgaggt tcaagtgaat ctcatgccic agcctcccca gtactagga
409101 ttacagggtgt gcaccatcac gtctggctaa tttttgtatt tttagttagg
409151 atggggtttc actatgtgtg atcccaccac tttgacctcc caaagtgtgt
409201 ggattacaga tqagagccac cacgtccggc taaaactttga aatttcata
409251 gcaaaatggt gtaaggtggg atgagatgtg ccttttatat ttcaaaactaa
409301 gaaaagcagga tatttcagta atttatltat tcataaagat cttttgaagt
409351 cctgccatgt gctaggcact gtaataagggt ctgggtgtac cttgttgatt
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409451 tcttttaaga ctgaaggatt tattccccca gcttttgagg agcttgtatg
409501 ctgacagcct tcttcagtga ctgtcttgct aaagaaaagt gccttatcca
409551 aggtccaqtc accttatagg ggcagcctgc aacaaatgac taqtcgcgcc
409601 aggcctaact ttaatttcca atgcaattac cattttttct tgttttcaaa
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409751 ggagcaattt actaatccat catagtgatt tcaagagttg agtattgact
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409851 tccccctccc cctctcccca cggctcctct ctcatgcgga gcccgagctg
409901 gactgtactg ctgccatctc ggctcaactgc aacctccctg cctgattctc
409951 ctgcctcagt ctgccaatg cctgcgattg caggcacgcg ccgccacgcc
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410101 ggattgcaga cggagctctg ttcaactcagt gctcaatggt gccaggctg
410151 gagtgcagtg gcgtgatctc ggctcaactac aacctacacc tcccagccgc
410201 ctgctctggc ctcccaagt gccagagatt cagcctctgc ccggccgcca
410251 ccctgtctgg gaagtgaaga gtgtctctgc ctggccgcgc atcgtctggg
410301 ctgtgaggag cccctctgcc tggctgccca gtctggaaaq tgaggagcgt
410351 ctccgcccgcc ccgccatccc atctaggaag ctctgcccg ccgccatccg
410401 ccgccatcac atctaggaag tqagagcgt ctctgcccg ccgccatccg
410451 tctgagatgt ggggagcgcc tctgcctccc cgccccatct gggatgtgag
410501 gagcgctctc gcccgccgga gcccccgtct gggaggtgag gagcgtctct
410551 gcccgccgccc ccggtctgag aagtgaggag acctctgcc tggcaaccac
410601 ccggtctgag aagtgaggag cccctccgccc cggcagctgc ccggtctgag
410651 aagtgaggag cctctccgccc cggcagccac cccatctgag aagtgaggag
410701 cgtctccgccc cggcagccac cccgtccgga agggaggtgg ggggggtcag
410751 ccccccgccc ggccagcgcc cccatctggg agggaggtgg ggggtcagcc
410801 ccccccgccc gccagccgtg cggtaggtgg ggggttc

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FIG. 1 CONT'D

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Expression of CLLD8/NY-REN-34 (ANGE) gene complex

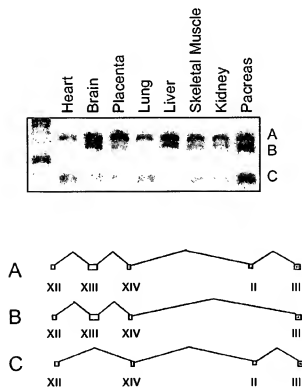


FIG. 2